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EX PARTE EAGLE, C. D. 1870,
PAGE 137

A paper read November 19, 1914, before the *Eastern
Copy of the United States Patent Office*

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Washington, D. C.
1914

Ex Parte Eagle, C. D. 1870, Page 137.

By

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This familiar and useful decision is based upon a case presenting as its subject-matter a mere blacking-box. Under it an applicant may disclose two or more modifications or species of his invention, may have a generic claim as broad as the state of the art will permit, and specific claims limited to one of the species presented. He may not, however, cover in terms more than one species. While the humble invention of the case to which the decision relates sufficiently illustrates the rule thus laid down, it is to be regretted that a more complicated structure such as a machine was not involved, for in that case the decision might have gone a step further and prescribed the number of modifications an applicant might disclose as well as the number he might specifically claim. It is the purpose of this paper to call attention to the abuse of this privilege of disclosing a number of modifications and of retaining them in the case provided they can all be covered by a patentable generic claim.

The decision calls only for the elimination of inconsistent claims, and not for the cancellation of the corresponding subject-matter. There is nothing in the rules or decisions to prevent an applicant from showing, describing, and claiming, say, five complete and complicated machines, printing presses, for example, providing they constitute modifications or species of some generic invention. The claims may or may not conform to the Eagle decision; if they do, there is no requirement to be made as to the number of modifications; if they do not, a requirement for election as to the groups of specific claims is in order, but none of the modifications will be eliminated provided there be the patentable generic claim. In such a case as this, the assistant examiner

must read the specifications of five heavy machines, whereas he ought not to be compelled to read the specifications of more than two, since the genus would be sufficiently illustrated and the preferred species also disclosed.

It is believed that a considerable part of the time of the office is consumed in reading the specifications of modifications presented in excess of this number, which would be saved by an extension of the Eagle decision or by a new rule of practice which forbade this excess. It must be remembered that the descriptions of these modifications must be read (and often studied) initially whether they ultimately remain in the case or not.

A cursory examination of a single class, namely 138, Hydraulic Motors, showed twenty cases disclosing more than two modifications, each modification constituting a more or less complicated structure or machine. These cases, however, represent only the residuum of about eight years; so that the total number of such cases in that time was probably three or four times as many, or from five to ten a year. Moreover, troublesome controversies with the applicant not infrequently arise as to whether a given modification is or is not covered by the generic claim. For various reasons applicants are reluctant to cancel figures or drawings together with the corresponding descriptive matter when required to do so by the office upon the ground that they are not covered by the generic claim, and seek to retain the matter in the case by contending that the requirement is not well taken, or by contending for far-fetched, loose, or otherwise objectionable interpretations of the terms of the claim relied upon as generic. It may be remarked *obiter* that the burden, which is laid upon the Examiner, of criticising specifications and claims of applications as to their technical, literary, and legal sufficiency is one of the reasons why more progress is not made with the work.

It is said that modifications are useful as enabling the judge in an infringement suit better to appreciate that a given invention may be embodied in a variety of forms, but one additional example should be as enlightening in this respect to an intelligent judge as a dozen. Therefore it is thought that it would involve no

hardship upon applicants if they were required to limit their disclosure to two modifications at the most.

As to the authority of the Commissioner with the approval of the Secretary of the Interior to make such a rule there would appear to be little doubt. The rule would be one of expediency, and would be analogous to Rule 42, which provides for the division of an application when two or more independent inventions are presented, or to Rule 36, which requires specifications and drawings to be restricted to the invention, which means the elimination of modifications not covered by any claim. If the office under *Ex parte* Eagle may limit the number of modifications which may be specifically claimed, if under Rule 42, it may limit the number of inventions, which may be claimed in a single application, and if under Rule 36, it may require the cancellation of figures or sheets of drawings not covered by the claim, it would also appear to have authority to restrict to a reasonable number the modifications or species by which an applicant seeks to illustrate his invention.

November 19, 1914.

Res Adjudicata as a Ground of Rejection

A paper read March 18, 1915, before the Examining
Corps of the United States Patent Office

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1915

Res Adjudicata as a Ground of Rejection

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The question of Prior Adjudication in Patent Office cases may come before the Examiner in several different forms. It is a question which, more often than otherwise, he must raise and consider on his own motion.

The subject is not without difficulty even in ordinary legal procedure and in Patent Office practice the character of the rights involved and the intricacy of the proceedings further complicate the questions.

I shall not discuss the doctrine of *res adjudicata* broadly nor attempt definitions. A very clear statement of the doctrine in general may be found in the case of *Nesbit vs. Riverside*, 144 U. S., 610, a decision of the U. S. Supreme Court. Assuming a knowledge of these general principles I shall refer only to those phases of the subject which directly affect the Examiner's action on applications.

That the doctrine applies to Patent Office proceedings is now so well settled as scarcely to require citation of authority. This will affirmatively appear from a perusal of decisions cited below, notable among which, on this point, is the early decision of the Court of Appeals of the District of Columbia, *In re Barratt's Appeal*, decided in February, 1899 (87 O. G., 1075; 14 App. D. C., 255).

The simplest case of this nature in the Patent Office arises when a second application for the same invention as claimed in an earlier application is presented for examination—the earlier application having been finally disposed of as unpatentable. Such second application, can not, of course, be ignored; it must be acted upon. Furthermore, as was pointed out in the case of *Ex parte Kenny* (118 O. G., 2253), a decision by the Commissioner in 1905, it requires some examination to determine

that it is for the same invention as a prior case; but having found this to be true, that alone constitutes a sufficient ground for refusing the patent. In ruling upon this point in the Barratt case, above cited, the court said:

In what we have said we do not desire it to be understood that the Patent Office may not, if it thinks proper to do so, entertain and adjudicate a second application for a patent after the first application has been rejected. What we do decide is, that it is not incumbent upon the Office as a duty to entertain such applications, and that, if it refuses to entertain them, it has a perfect legal right to do so. An applicant is not legally aggrieved by such refusal.

This view had been taken by the Office long prior to that decision, as appears from the Commissioner's decision in *Ex parte* Nichols rendered in July, 1870 (C. D., 1870, 71). In 1872, however, two decisions were rendered by the Commissioner in which the position was taken that such second application should also be examined on its merits and the pertinent prior art applied to the claims. These were the cases of *Ex parte* Le Van (C. D., 1872, 40), and *Ex parte* Gordon (C. D., 1872, 145), decided in March and June, respectively, of 1872.

The latter case involved a so-called "renewal" under the act of 1870, which allowed six months for the renewal of certain applications rejected under former acts. The decision was based upon the terms of the act and therefore involves a special case having no real bearing on present cases.

The case of *Ex parte* Le Van, however, contains an argument for adding an action on the merits based on the prior art, which at first blush seems difficult to meet. It is this: if the case be rejected on *res adjudicata* alone the applicant must spend at least ten dollars additional in appeal fees before receiving an action on the merits, in the event the Examiner is wrong about the *res adjudicata*, whereas the statute provides for an examination on the merits for the first fee of fifteen dollars.

An answer to this argument, however, is to be found

in the fact that no one has a right to thrust useless work upon the Office merely by going through the form of filing applications. On this very point the Court of Appeals said, in the Barratt case cited:

If a second application could be regarded as proper, why not ten or twenty successive applications? Where are the applications to stop, and what would become of the public business, if it were in the power of one person to obstruct the operations of the Patent Office by repeated and persistent applications? These questions answer themselves.

As to the extra cost of ten dollars which may be involved, this is, in any event, not conclusive against the practice, for the same objection might be raised against the present practice in requiring division. That, too, may involve the expense of an appeal prior to a full action on the merits. Yet the present practice on division was instituted on no less an authority than that of the Supreme Court of the United States, whose decision in the Steinmetz case took the appeal in the first instance in such cases away from the Commissioner, where no fee was required, and sent it to the Board, where a fee is required.

On this point it is also to be observed that the fee for appeal to the Board on the question of *res adjudicata* will cover any later appeal on the merits which may be taken to that tribunal, and such an appeal will almost certainly be necessary if the Examiner was originally of the opinion that the first and second applications were substantially identical.

Furthermore, the Examiner is unlikely to be in error in rejecting a case as *res adjudicata*. This ground of rejection is in fact applicable in relatively few cases. The tendency, if only from habit, is to examine a case on its merits and the doctrine of *res adjudicata* is not apt to be applied except in a clear case.

Returning, for a moment, to the course of the Office decisions on the subject, it may be noted that in the case of *Ex parte Arkell* in June, 1877 (C. D., 1877, 73), prior to the Barratt decision by the court, the Commissioner

returned to the holding of the Nichols case of 1870, and in *Ex parte* Kenny, in October, 1905 (118 O. G., 2253), and *Ex parte* Millet and Reed, in May, 1907 (128 O. G., 2836); following the Barratt case, the practice of disposing of the case on the ground of *res adjudicata* alone was fully and specifically authorized. A still later case by the Court of Appeals of the District, *In re Edison*, decided in February, 1908 (133 O. G., 1190; 30 App. D. C., 321), recognizes the practice as correct and quotes the Barratt case with approval, though the decision went off on another point.

Under the existing authorities, therefore, it seems clear that the Examiner *need* not go into the merits of the second application. On the other hand, there is no ruling to prevent his doing so if the ends of justice seem to require it.

As to the character of the application which is subject to this rejection, it is obvious that the second case need not be an exact duplicate of the earlier one. Even the claims need not be duplicates, as will appear from *Ex parte* Millett and Reed and *In re Edison*, cited. The criterion is identity of the inventions claimed in the two cases. The advantage to be gained in saving of time and labor by an application of the doctrine manifestly diminishes rapidly with the divergence in the disclosures of the two cases in question, because the difficulty of determining identity increases in proportion as it is concealed by changes in disclosure and terminology. Nevertheless, if prior adjudication is a pertinent ground of rejection in any case, it should be used by the Examiner at least in connection with other reasons of rejection so that in the event of an appeal on the merits the complete situation may be laid before the appellate tribunal.

Ordinarily, the saving of work by applying the doctrine is considerable, since, as a rule, the finding of identity is easy, while the examination and application of the prior art is difficult and time-consuming.

The most common occasion for rejecting claims as *res adjudicata* is after an interference. Rejections under rule 132 are, in fact, nothing more nor less than this, as, of course, are the rejections of other claims to the

same invention as that in issue, whether contained in the same application or a different one.] That an interference constitutes an adjudication in favor of the winning party, of all subject-matter common to the cases involved, is a familiar rule of frequent applicability. It has been so firmly established by the decision in *Blackford vs. Wilder* (127 O. G., 1255; 25 App. D. C., 535), and subsequent decisions of the Court of Appeals as to need little comment. It should be observed, however, that this rule obtains even in cases where the claims in question could not ordinarily have been introduced into the existing interference; provided, only, that the party to be rejected had notice of the fact that the subject-matter of those claims was subject-matter common to the cases.

Thus, in the case of *Temple and Goodrum* (176 O. G., 526), the losing party to an interference thereafter presented claims which read upon his own case and upon the two other cases with which he had been involved, but which could not have been added to that interference because of a decision in another interference adverse to one of the other parties. These claims were held *res adjudicata* because the applicant, had he chosen to do so, could have presented and contested them with the party who could have made them, concurrently with the other interfering subject-matter, although, necessarily, in a separate two-party interference.

Again, in the *Marconi* case (179 O. G., 577; 38 App. D. C., 286), Marconi had two applications disclosing different species of the same invention. One went into interference with Babcock, on specific claims. The other went to issue on claims to the other species. Marconi lost the interference and then attempted to reissue the patented case with broad claims. When these met rejection on the ground of *res adjudicata*, he contended that they could not have been made and adjudicated in the interference because he could only have presented and patented those claims, if at all, in the first case to go to patent, under penalty of having them held invalid by the courts. Nevertheless the Court of Appeals held that he was concluded by the decision in the interference because he could, if necessary, have filed his re-issue application in time to have had it included in the

first interference, or could have prosecuted the claims through the interference in the pending case, and then transferred them to a reissue application.

A holding of similar effect was made in the case of *Robinson vs. Copeland* (187 O. G., 514 and 188 O. G., 1055).

Where the proceedings in an interference are such that the parties do not have the opportunity to inspect each others' applications, as where the interference is terminated by a concession of priority early in the proceedings, the doctrine of *res adjudicata* apparently does not apply to claims for matter not covered by the actual issue of that interference (*Felsing vs. Nelson*, 20 Gour., 6-12).

As a general thing the rule extends, however, not only to claims other than the precise issue but to claims presented in applications of other inventors than those actually involved in the interference when such applications or the inventions therein disclosed were controlled during the pendency of such interference by the same party in interest as the application actually involved. In the case of *Temple and Goodrum* above referred to the assignee of the losing party presented the claims of the issue in another application by a different inventor owned by the assignee at the time the interference was declared, and the Commissioner held that the prior adjudication was ground for rejecting such claims in that application as well as in the application which was unsuccessful in the interference.

This ruling was further extended in the case of *Frickey vs. Ogden*, decided in November, 1913, by the present Commissioner (199 O. G., 307). There, the second application in which the claims were presented, though owned by the same assignee, was not only by a different inventor but was not on file at the time the interference was declared. It appeared, however, that the assignee controlled both inventions at that time and could, had it desired, have filed the Frickey application in time to have it included in the interference, and it was held that the right of the assignee was *res adjudicata* and the interference was dissolved. This decision is not, of course, to be taken as holding that the doctrine will invariably be applied to such applications, because, like

other decisions, it is based upon a specific set of circumstances. It well illustrates, however, what a salutary use may be made of the principle, in Patent Office practice.

Formerly it was generally assumed that nothing short of a final rejection of claims *ex parte* or a formal award of priority in an interference was ground for a holding of *res adjudicata*.

In its decision in the Newcomb Motor case, however, rendered in 1908 (133 O. G., 1680; 30 App. D. C., 464), the Court of Appeals went farther than this. It held that a decision of the primary examiner rendered upon a motion to dissolve may, under certain circumstances, be a final adjudication. The circumstances in that case were briefly these: The Examiner held that Thompson had no right to make the claims, and dissolved the interference. An appeal from that decision was filed, but was afterward abandoned. Thompson then appealed the claims *ex parte*, and got them allowed. The Examiner thereupon redeclared the interference and Newcomb moved to dissolve, on the ground of *res adjudicata*. The Commissioner, when the question came before him, set aside all proceedings subsequent to the first decision of the Examiner dissolving the interference but ordered a reconsideration of that holding *inter partes*, with the right of appeal should the Examiner hold to his original opinion. The court's decision came on a petition for mandamus. It held that the Commissioner was without authority to order such a reconsideration and that Thompson was concluded, once for all, by the first decision of the Examiner when it became final by failure to prosecute an appeal therefrom.

It is important to note that the Examiner's holding was to the effect that the party had no right to make the claims and that the court apparently based its ruling upon the idea that this was equivalent to an award of priority to Newcomb so far as Thompson was concerned, inasmuch as a lack of right to make the claims is ground for awarding priority (*Podlesak vs. McInnerney*, 120 O. G., 2127; 26 App. D. C., 399). No dissolution of an interference on any other ground has, thus far, been held conclusive as to a party's right to a patent.

The *inter partes* consideration of the prior art, for instance, on motions to dissolve based on unpatentability is apt to be more thorough, if anything, than an *ex parte* consideration, and there seems to be no good reason why an *inter partes* determination that claims are unpatentable over the art should not be equally binding upon the parties, except that no *inter partes* appeal can be taken to the Court of Appeals on such a question under the present decisions of the court, and every applicant is, of course, entitled to the opportunity of appeal to that court upon the patentability of his claims before they can be held finally adjudicated against him (see *Gold vs. Gold*, 150 O. G., 570; 34 App. D. C., 229). Motions to dissolve, as such, can go no further than the Commissioner. Of course this objection applies also to motions to dissolve on the ground of no right to make the claims, but in the Newcomb Motor case, the court stated that the Commissioner undoubtedly had jurisdiction to go farther upon the decision of a motion based upon this ground and award priority to the party who could make the claims, and from such an award appeal could be taken to the Court of Appeals. Following this suggestion the Commissioner has in many cases awarded priority instead of dissolving the interference when a motion to dissolve, on the ground of no right to make the claims, has come before him, and the court has entertained appeals from such decisions (*Casper vs. Gold and Gold*, 151 O. G., 194; 34 App. D. C., 194, and 168 O. G., 787; 36 App. D. C., 302).

As will appear from the cases which have been referred to it has frequently happened that the finding of *res adjudicata* has not been made until the case has become involved in an *inter partes* proceeding. This has usually happened, however, either because the rules which control such cases were in process of formation or because the Examiner failed to note the prior adjudication or disagreed as to its applicability. In all the various circumstances which have been here discussed it is the duty of the Examiner to use the prior adjudication as a ground of rejection in the *ex parte* treatment of the case, and to do so will often avoid the declaration of unnecessary interferences and their attendant complications.

March 18, 1915.

THE ENTRY OF AMENDMENTS

In power since December 19, 1941, before the Executive
Council of the United States Patent Office.

THEODORE A. HOSTETLER

From Assistant Examiner, Division Eleven,
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Washington, D. C.

1942

The Entry of Amendments

By

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It is the well settled practice of the Patent Office to permit an inventor to amend his application under certain restrictions, to supply omissions and defects and correct informalities in the papers that have been filed, and to otherwise revise the application to secure for him the invention to which he is legally entitled. But in permitting amendments to be made, due regard must be had for the rights of the public in general and the rights of rival inventors.

UNSIGNED OR IMPROPERLY SIGNED AMENDMENTS

which are to be returned for signature should be forwarded to the Chief Clerk of the Patent Office with a memorandum giving the name and address of the attorney, date of the last office action in the case, and a statement as to why the paper is to be returned. The Chief Clerk will cancel the receiving stamp and conduct the correspondence incident to the return of the papers. If there is not sufficient time for the return of the amendment for signature before the expiration of the time allowed by law within which to take proper action, the examiner will endorse it on the file wrapper, but will not enter the amendment, and will notify the applicant of the status of the case. The informal amendment may be useful in determining the question of abandonment of the application.

In all cases where papers are returned to applicants for any reason it is advisable that the clerk place a pencil memorandum in the file for future reference. The record in every case should be so complete that any person

taking up the case at any time can understand the status or condition of the case without making any inquiries.

If an amendment is signed by rubber stamp, it should not be accepted. *Ex parte Minehan*, 134 O. G., 1298 (1908). Acceptance of amendments so signed would open the door for grave irregularities. Amendments should be signed by the applicant or his attorney with pen and ink or their equivalent. An amendment with a stamped signature should be treated as an unsigned or improperly signed paper.

PERMANENT INK.

Amendments must be written in permanent ink. *Ex parte Burns*, 101 O. G., 661 (1902). In 1880, July 30th, Commissioner Marble issued the following order, No. 32:

All applications, communications, and other instruments in writing or print, which should constitute a permanent record in the office, must be prepared with a substantially permanent ink. Analin and other perishable inks will not be accepted.

It appears that a permanent ink must have a foundation of lampblack or carbon. The tests given in *Ex parte Blaubach*, 84 O. G., 1732 (1898), and used in other Executive Departments are two in number—first the application of Labarraque's solution followed by a saturated solution of oxalic acid, and second, the application of a 10 per cent solution of nitric acid. *Ex parte Ritter*, 57 O. G., 1883 (1891) is another decision that bears on the question of fugitive inks. See also Rule 30.

AMENDMENTS IN GENERAL.

Where an amendment to an application is received more than a year after the date of the last office action, it is indorsed on the file wrapper of the application, but is not formally entered, and the examiner immediately notifies the applicant that the amendment was not filed within the statutory period, and therefore can not be entered. Order 1854.

When an Associate Attorney is prosecuting a case, and the Principal Attorney files an amendment over his own signature, it must be entered and acted upon, if it is otherwise a proper amendment. The practice of filing amendments by both the principal and associate is discouraged. *Ex parte Eggan*, 172 O. G., 1091 (1911). This decision also states with whom the correspondence is held when there are several attorneys in the case.

A substitute specification is objectionable and in general should not be filed unless required by the office in view of the number or nature of the amendments to the original specification. No general rule can be given as each case must be decided upon its own merits. *Ex parte Orewiler*, 170 O. G., 481 (1911).

Where an inventor files his own case, and at the suggestion of the office employs an attorney a new specification is admitted. *Ex parte Clifford*, 193 O. G., 511 (1913). This is not an exception to the general practice, but is based upon the presumption that the conditions are such as to necessitate a new specification.

It is the well-settled practice of the office that an amendment can not be entered in part. To enter an amendment so far as responsive and to refuse to enter the remainder thereof, would lead to endless confusion. As an example, where after final rejection an amendment is presented canceling the finally rejected claims and presenting certain new claims without a verified showing, the amendment should not be entered. *Ex parte Hodge*, 173 O. G., 1079 (1911).

An amendment is presented in which the last claim is canceled by a line drawn through it with a pen without anything to indicate who canceled it. The amendment is informal but should be entered and applicant should be required to cancel the claim by the usual amendment. In like manner, pencil interlineations which apparently are intended to be a part of the specification should be called to applicant's attention in order that they may be erased or entered in the case upon proper authorization.

Where applicant's instructions to amend are erroneous, but it is clear what his intentions are, the amendment should be properly entered and applicant, in the next office letter, should be informed definitely what has been done.

Where a case is not closed against further prosecution and an amendment is received that is fully responsive and also contains additional matter that is not responsive, it is the practice to enter the entire amendment; give action on the responsive part, and require the cancellation of the part that is not responsive.

Claims which necessitate the requirement of division, if presented in an amendment, should be entered and division required. Claims presenting a new species other than that elected should be entered and applicant should be required to cancel them. *Ex parte Selle*, 110 O. G., 1728 (1904).

Where the examiner suggests claims to an application for the purpose of interference under Rule 96, and sets a time within which to make them, and the applicant does not make the claims until the other interfering application has become a patent, it was held that the amendment should be entered, and the claim considered in order to give applicant an opportunity for appeal. *Ex parte Swift*, 111 O. G., 2494 (1904).

DELAYED APPLICATIONS.

It is a great injustice to the public and other inventors to permit an applicant to prosecute his application indefinitely and keep his invention from the public while the art is growing up and passing by his invention. To then allow a patent to issue with claims covering the art is unjust and inequitable to the public and especially to other inventors who have developed the art. The practice announced in *Ex parte Miller*, 139 O. G., 730, and *Ex parte Perry*, 140 O. G., 1001, is designed to remedy this evil by closing the prosecution of applications before the office, when they have been pending for a long time, or when an issue has been reached.

The policy of the Patent Office, as gleaned from the Commissioner's report, 199 O. G., 939, and a later report in the *Scientific American*, August 1, 1914, is to reduce the time during which applications may pend in the office. An order is now in force which requires amendments to cases which have been pending five years or more, to be called to the personal attention of the Commissioner before being entered. This time is to be

gradually reduced until cases which have been pending more than two years will probably be included in this order. An investigation instituted by Commissioner Ewing last June disclosed the fact that the patents issued during the first six months of 1914 were pending in the office as applications an average time of twenty-one and one-half months. This average has risen until it is now (December, 1914) more than two years. With many of the old applications ultimately eliminated the average time applications pend in the office will be much less than that. Hence a new rule or order requiring all cases which have been pending more than two years and all amendments thereto to be called to the personal attention of the Commissioner may eventually be promulgated.

AMENDMENTS AFTER FINAL REJECTION.

After a case is under final rejection, the following amendments may be entered:

(1) Amendments canceling claims or the matter upon which appeal is to be taken.

(2) Amendments presenting the rejected claims in better form for appeal.

(3) Amendments accompanied by a showing duly verified of good and sufficient reason why they were not earlier presented.

(4) The examiner has discretion to admit other claims for the purpose of appeal.

(5) He can waive the final rejection and open the case for further prosecution.

(6) He can admit amendments containing claims for the purpose of interference.

(7) He can admit an amendment containing a claim which he deems patentable; but the entry of the amendment does not reopen the case for further prosecution.

When broad claims are finally rejected, an amendment canceling the broad claims and substituting more limited claims is not in itself a sufficient showing to reopen the case. *Ex parte Lange*, 163 O. G., 727 (1911).

In a finally rejected case, the Examiners-in-Chief affirmed the examiner but cited a new reference which disclosed certain features of the claim not shown in the

references of record. This reopened the case for further prosecution before the examiner. *Ex parte Wade*, 158 O. G., 704 (1910).

Where claims which were recommended by the Examiners-in-Chief are rejected by the examiner on new references, applicant has a right to amend them or substitute new claims therefor, provided they are directed to the same invention as that covered by the rejected claims. If, however, a claim is presented directed to an invention different from the rejected claim, it should not be entered, as the case is not reopened for general prosecution. *Ex parte Lindsey*, 156 O. G., 1067 (1910).

Where, after a final rejection, an amendment is presented containing some claims which are admissible, such as claims copied from a patent, for instance, and some which are not admissible, the entire amendment should be entered and the requirement made that the claims which are not admissible be canceled before forwarding the appeal. *Ex parte Stickney*, 185 O. G., 1379 (1912).

After final rejection amendments to the description which do not touch the merits of the claims but present the invention more clearly may be entered without reopening the case for further consideration. *Ex parte Loppentien*, 122 O. G., 1723 (1906).

If, after final rejection, the examiner requires an amendment to the specification, this does not reopen the case. Final rejection of claims in a case closes the further prosecution not only of the claims under final rejection, but of others substituted therefor. *Ex parte Casselman*, 116 O. G., 2012 (1905), and *Ex parte Novotny*, 108 O. G., 1327 (1904).

In a finally rejected case, and in response to an argument, the examiner called attention to a new reference as showing features referred to in the argument. It was held that this citation reopened the case. *Ex parte Lawton*, 97 O. G., 187 (1901). This decision is based on Rule 68, which states that an applicant "may amend as often as the examiner presents new references or reasons."

No definite rule can be laid down to determine what constitutes a satisfactory showing of reasons why the

amendment was not earlier presented. In determining this question the record of the application should be considered, to see whether the application has been prosecuted in good faith and expeditiously. In *Ex parte Schmidt*, 171 O. G., 482 (1911), an affidavit was filed by the attorney of record, to the effect that matters contained in the amendment were not earlier presented because of the fact that the inventor had not earlier pointed out to counsel features covered by the proposed amendment. This was held to be a sufficient showing, as the case had been prosecuted in good faith and expeditiously. This case is not inconsistent with *Ex parte Schrader*, 120 O. G., 2127 (1906), where the petition was denied. There the attorney had filed a statement, stating that the inventor had not called the attention of the attorney to the subject-matter of the proposed claims. The proposed claims were presented to be substituted for the claims finally rejected by the examiner, which rejection was affirmed on appeal by the Examiners-in-Chief and also by the Commissioner.

The excuse that the inventor did not fully explain the subject-matter to the attorney must be carefully considered, as it can be given in almost any case, and if accepted as sufficient, the rule against amending after final rejection would be a nullity.

When a claim is admitted under Rule 68 upon a showing duly verified, the claim must be considered and acted upon by the examiner. He can not hold that it was admitted for appeal only. *Ex parte Meyer*, 148 O. G., 1088 (1909).

Where claims are finally rejected and applicant alleges that such claims cover a feature not disclosed in the application, held, that applicant should be permitted to present for appeal claims which unquestionably read upon his disclosure. *Ex parte Swanson*, 21 Gour., 76-30 (Aug., 1909).

An applicant has no right to amend after decision on appeal except under unusual circumstances and where a proper showing is made. Even then a petition must be made to the Commissioner to reopen the case. *Ex parte Auer*, 116 O. G., 595 (1905).

AMENDMENT AFTER ALLOWANCE—RULE 78.

Let us follow the course of an amendment under Rule 78, from the time it is filed up to and including its final disposition. After being filed in the Application Division the amendment is sent to the Docket Clerk who then sends to the Issue and Gazette Division for the allowed application file, to which he attaches the proposed amendment, and the notice for the examiner's recommendation, all of which he sends to the examiner. The examiner will recommend that the proposed amendment be entered or not entered as the case may be—usually by endorsement on the proposed amendment—and returns the file with the attached parts, together with his recommendation, to the Docket Clerk, who will transmit it to the Commissioner. If the Commissioner approves the entry of the amendment, the Docket Clerk will immediately send the file and papers to the examiner who will cause the amendment to be entered. The file is then brought back to the Docket Clerk and the applicant or his attorney is notified that the amendment, having been recommended by the examiner, and approved by the Commissioner, has been entered. This letter bears the signature of the Chief Clerk. The Docket Clerk then returns the application to the Issue and Gazette Division. In case the examiner recommends that the amendment be not entered, he will write a letter stating his reasons therefor, and send a copy to the applicant, and return the file, together with the adverse recommendation, to the Docket Clerk, and if the Commissioner approves such adverse recommendation, the Docket Clerk will in like manner notify the applicant or his attorney that the adverse recommendation of the examiner, on the admission of the amendment, a copy of which was sent to him, has been approved by the Commissioner and will return the file to the Issue and Gazette Division.

The examiner is presumed to have jurisdiction of the case until the notice of allowance is sent to applicant. All proper amendments, therefore, received before the notice of allowance is sent, must be received and considered. This is analogous to the practice in interference cases, where the examiner retains jurisdiction of the case until the Examiner of Interferences declares the interference by

forwarding the notices to the several parties to the proceedings. Rules 100 and 102. If an examiner sends a case to issue and thereafter a proper amendment is received, which was filed before notice of allowance is sent, the amendment must be entered and considered. If the notice of allowance is sent, the examiner must withdraw the case from issue and enter and consider the amendment. This is the practice. But if the amendment leaves the case in condition for allowance, no reason is seen why it should not be entered under Rule 78 without withdrawing the case from issue, upon the initiative and recommendation of the examiner, and the approval of the Commissioner. This course would avoid the necessity of withdrawing the case from issue, and of sending a second notice of allowance.

After a case has been sent to issue and the notice of allowance sent, the time for amending, as a matter of right, has expired. The entry of claims under Rule 78 is not a matter of right, but is a privilege granted to applicants after such examination of the case by the examiner as he may deem necessary. *Ex parte Goldsmith and Whiting*, 184 O. G., 553 (1912).

The admission of amendments under Rule 78 rests largely with the examiner, whose recommendation will not be overruled except under unusual circumstances. It is well settled that an amendment will not be admitted after allowance, where it requires a reexamination of the case. *Ex parte Holz*, 154 O. G., 1411 (1910).

If the examiner reports that the claims are unpatentable, they will not be entered. *Ex parte Langhaar*, 159 O. G., 747 (1910). The applicant has no right to appeal from the examiner's decision holding that the claims are unpatentable and therefore the usual reason for explaining fully to the applicant the grounds upon which the conclusion is based does not exist. *Ex parte Orndoff*, 140 O. G., 1001 (1909). Rule 78 does not provide for prosecution of the case. The examiner has no jurisdiction and his report to the Commissioner is not an action in the case. No hardship or irreparable injury results from the refusal to enter the amendment under Rule 78, as the applicant may allow the application to become forfeited and then file a renewal, or he may abandon

the application in favor of a continuing application, and in this way, secure consideration of the amendment as a matter of right.

The claims in a certain case were finally rejected, appealed to the Examiners-in-Chief, and allowed. The case was passed to issue, and then withdrawn for the purpose of interference. The applicant was defeated in the interference and the claims were rejected under Rule 132. The applicant now presents an amendment canceling the rejected claims and adding new claims. What shall be done with the amendment? The amendment must be entered and considered. The case is not closed before the examiner, although it was closed before the appeal was taken. Withdrawing a case from issue for the purpose of interference reopens the case for further prosecution, and moreover the rejection under Rule 132 is a new ground of rejection. *Ex parte Klepetko*, 126 O. G., 387 (1907).

AMENDMENTS TO THE PETITION.

The entry of amendments to the petition of an application is governed by Order No. 1874 as modified by Order No. 1994. The petition in an application may be amended to correct names and addresses (other than post-office addresses), and titles of invention. To make a change in the post-office address, a letter signed by the applicant in person and giving his actual post-office address will be accepted. An applicant's post-office address in care of his attorney will not be accepted. *Ex parte King*, Com. MS. D., Mar. 23, 1900.

AMENDMENT OF THE DRAWINGS.

Where applicant desires to amend a drawing, he should file a photographic print of the original drawing and illustrate on this print or by means of a sketch the change in the original drawing that he desires to make. The print and sketch should then be filed accompanied by a written request for permission to amend the drawing as indicated. The examiner's response to this request should be in writing. Signatures to the drawing may be corrected and reference characters changed by the

office without filing photographic prints if the requirement for such corrections and changes appear in the examiner's letter.

Order No. 2112, of March 30, 1914, directs that—

Hereafter, corrections and alterations in the disclosure of the drawings of pending applications will be made only by the draftsmen employed by the Patent Office. Inventors, attorneys, and examiners will be guided by this order. The Chief Draftsman will make a reasonable charge for such changes as may be necessary. (See Order No. 1958 of February 3, 1912.)

The purpose of this order is to stop the constant mutilation of office records.

EXAMINER'S AMENDMENTS UNDER ORDER 1718.

Where the citizenship of the applicant is given in the oath, but omitted in the preamble to the specification, it may be supplied by examiner's amendment.

In applications otherwise ready for allowance, where the first name of the applicant is disclosed in the record but does not appear in the preamble to the specification, the examiner will insert the first or Christian name of the applicant in the preamble by examiner's amendment.

Examiner's amendments are a great convenience in making minor corrections, but care must be exercised so as not to expand this order to include amendments other than the correction of obvious informalities.

AMENDMENTS CONTAINING NEW MATTER.

The subject of new matter will be presented in another paper, and will not be treated in this paper further than to say that an amendment containing claims to new matter should be entered and rejected for that reason and all other reasons which are deemed applicable. Rice, 21 Gour., 56-22 (June, 1909).

If the amendment attempts to introduce new matter

into the specification but does not present claims for the new matter, the examiner should refuse to enter it. Ex parte Mothes, 113 O. G., 1146; and Ex parte Smith, 58 O. G., 1840 (1892).

If the amendment attempts to introduce new matter into both the specification and the claims, the entire amendment should be entered. The examiner should reject the claims and require the new matter in the specification to be canceled. New drawings, however, should not be entered until the question of new matter is finally determined. Ex parte Furness, 104 O. G., 1655 (1903).

December 10, 1914.

Double Patent

A paper read December 7, 1916, before the
Corps of the United States Patent Office

BY

CHARLES H. SHAFER
First Assistant Examiner, Division II
U. S. Patent Office

WASHINGTON, D. C.
1916

Double Patenting

By

CHARLES H. SHAFFER,

First Assistant Examiner, Division Thirty-two,
U. S. Patent Office.

The bald statement that Double Patenting is contrary to the intent and purpose of the patent system may be made without fear of contradiction. When does Double Patenting occur is the question to be settled. Before attempting to answer the question it would be well to consider certain of the early decisions which have helped to shape the law into its present form.

Justice Story in 1819 (*Odiorne vs. Amesbury Nail Factory*; 2 Mason, 28; Fed. Cases 10,430) held a patent granted to F. Reed for a Nail Cutting and Heading Machine in 1810 invalid in view of a patent granted to the same inventor in 1807 for the same invention. The court stated the reason for this holding to be that the power to create a monopoly is exhausted by the first patent, and, moreover, the second and later patent for the same invention operates to prolong the period of monopoly beyond that allowed by law. This ruling, laid down in the first case on record in which the question of double patenting arose, has been uniformly followed, some courts basing their decision upon the first ground and the remainder, the majority, upon the second ground.

The next case on record (*Morris vs. Huntington*; 1 Paine, 348; Fed. Cases, 9831), decided in 1824, involved the validity of a patent granted in 1822 to Morris for a stopcock in view of a prior patent granted in 1816 to the same inventor. Both patents were for the same invention but the first patent failed to expressly point out the particular invention and was therefore held invalid by the court as too broad. The second patent was accordingly taken out to remedy this deficiency and thus

properly cover the invention. In holding the second patent invalid the court suggested that the inventor should have surrendered his first patent and have taken out the second for the remainder of the monopoly to which he was entitled by his patent of 1816. It is interesting to note that eight years later, in 1832, the Supreme Court of the United States in *Grant vs. Raymond* (6 Peters, 218) held this practice proper. The general practice of granting reissue patents was instituted by this decision.

The case of *Sickels vs. The Falls Co.* (4 Blatch., 508; Fed. Cases, 12,834) decided in 1861, involved the form of double patenting which most commonly arises today; that is, the relation between a patent having generic claims and a patent to the same inventor having specific claims upon a form of the same subject-matter. The application for the generic patent was filed *after* the specific patent was granted and the claims in the later patent were met by the structure shown and claimed in the earlier. The later patent was held invalid upon the ground of double patenting and the law on which the holding was based appeared to have been so well recognized that no application thereof was necessary.

In 1865 the Supreme Court placed its approval upon the rule against double patenting (*Suffold Co. vs. Hayden*, 3 Wall., 315). The case involved several patents granted to Isaac Hayden, of which only 18,742 and 29,971 are of interest to us. The application for the later patent was pending in the Patent Office when that for the earlier patent was filed. The court held that the patents were for separate inventions since, although both applied to an improved trunk to be used in cleaning cotton and other fibrous substances, the earlier claimed merely the interior arrangement of the trunk while the later claimed a trunk having such interior construction in combination with a machine for opening the cotton and blowing it through the partitions. In its decision the court stated that if both had been for the same invention the first patent would have been held valid and the second invalid since the date of issue, not of filing, determines the question of priority between patents issued to the same party on the same invention.

The first recorded Patent Office decision on this point

(*Ex parte Atwood*, 1869, C. D., 98) concerned an application filed by Lewis J. Atwood having a broad claim which dominated patent 73,488 to the same party for the same invention granted before the filing of the application. The Commissioner refused to allow the application and in his decision said:

“All claims granted upon the thing described have a common origin—the original application. The monopoly founded upon them has a common duration—the lifetime of the original patent. . . . When an application is filed, every invention contained in that application must be patented under it, or under such divisions of it as the wishes of the applicant and the rules of the Office may permit.”

This holding would have greatly simplified the Office practice but was found to work injustice to the inventor and was later modified.

The Supreme Court in *James vs. Campbell* (104 U. S., 356; 21 O. G., 337), when deciding that reissue 4,143 with generic claims of patent 38,175 with specific claims to Norton was invalid because prior patents granted to the same inventor showed the combination now claimed, said:

“It is hardly necessary to remark that the patentee could not include in a subsequent patent any invention embraced or described in a prior one granted to himself, any more than he could an invention embraced or described in a prior patent granted to a third person.”

The Circuit Court of Vermont in 1884 (*Vermont Farm Machine Co. vs. Marble, Comm'r*, 19 F. R., 27 O. G., 621) construed the terms “embraced or described” in the above decision to mean that the inventor is not entitled to a patent for an invention previously *patented* and stated that mere description is not a bar. A decision two years later by the Supreme Court of the District of Columbia in *Hill vs. Comm'r of Patents* (4 Mackay, 266; 33 O. G., 757) upon the identical state of facts, held that by “embraced or described” was included that con-

dition of affairs by reason of which applicant must apply for a reissue and not an independent patent in order to cover certain matter not previously claimed. This uncertainty as to when matter is "embraced or described" led Commissioner Mitchell in *Ex parte Mullen and Mullen* (50 O. G., 837; 1890 C. D., 9) to lay down the following rules for treatment of related applications to be followed in the Patent Office:

1. Where the applications are based upon the same structure so that there can be no patentable difference between the claims but merely a difference in scope only one patent may be granted.
2. Where the matter embraced or described but not claimed in the first application could have been claimed therein, the application claiming such matter must be copending with the first, or else no patent can be granted therefor because the grant of a patent on the first application amounts to a dedication to the public of such matter.
3. Where the matter embraced or described but not claimed in the first application could not have been claimed therein, an application therefor filed within two years after the grant of the patent on the first application may be allowed unless a bar has been created by public use or sale.

Before taking up a more detailed examination of the question of double patenting the following decisions of the Supreme Court which have had great influence upon the present view of the question, should be considered:

Miller vs. Eagle Mfg. Co., 151 U. S., 186; 66 O. G., 845; and

United States of America vs. American Bell Telephone Co., 167 U. S., 224; 79 O. G., 1362.

The first decision concerns patents 222,767 and 242,497 granted to E. C. Wright for an improvement in Cultivators. A spring in the cultivator was so arranged as to urge the beam downward when in action and upward when raised above operative position. As originally

filed the application contained claims to both functions, but because of an interference upon the lifting function a divisional application for the depressing function was filed and became a patent, followed after the termination of the interference by the patent upon the lifting function. The Circuit Court of the Southern District of Iowa had previously reviewed these patents (*Eagle Co. vs. Bradley*, 35 F. R., 295) and held both valid. The Supreme Court, however, held that while the patents differed in purpose they were directed to the same element and that only one patent can be granted upon a single element.

In the second decision the Supreme Court placed the seal of its approval upon the rule laid down in the lower courts that the delay of the first filed application, having generic claim, in the Office through no fault of the inventor, during which time an improvement patent upon a second filed application is granted, does not render the broad claims of the second patent invalid.

Certain general rules applying to different phases of double patenting while well known, are herein recited in order to cover the subject completely.

1. When two patents have been granted to the same inventor for the same invention, the second is void. (*Miller vs. Eagle Mfg. Co.*, *supra*.)

2. The date of issue, not of application, determines priority between patents. (*Suffolk vs. Hayden*, *supra*.)

3. In cases where both patents are issued on the same day, the courts generally have permitted the inventor to choose the patent to be held void. (See *Brush Electric Co. vs. Julian Electric Co.*, 41 F. R., 679; *Electrical Accumulator Co. vs. Brush Co.*, 52 F. R., 130, and *H. S. Johns Mfg. Co. vs. Robertson*, 89 F. R., 504; but see *Crown vs. Standard Co.*, 136 F. R., 841.)

4. In cases of true double patenting the question whether or not the patents are for the same invention must be determined by consideration of the *claims*, not of the *description*. (*Merrill vs. Yeomans*, 94 U. S., 94; 11 O. G., 970; *Mahn vs.*

Harwood, 112 U. S., 354; 30 O. G., 657; Adams *vs.* Stamping Co., 28 F. R., 360.)

5. "The first patent does not invalidate the second patent for a distinct, different and separable invention whether generic or specific; whether an original machine or process, or both, or an improvement thereon, which is not actually claimed or dedicated by the earlier patent." (Matthews *vs.* Flower, 25 F. R., 830).

6. The later patent although valid over the earlier is limited thereby. (McCaslin *vs.* Link Belt Co., 139 F. R., 393.)

7. The fact that two applications by the same inventor have been assigned to different parties does not affect the bearing of the rule against double patenting, and the grant of the first patent to one assignee is a bar to the grant of a second patent to a different assignee. (Ex parte Pearsall, 135 O. G., 221; 19 Gour., 40-24.)

After this preliminary consideration of the growth of double patenting and of the general rules laid down, during such growth, a more careful analysis of the decisions on this question is in order. These decisions may be roughly grouped as follows:

1. Where the question of patentable distinction is involved.
2. Where the question of generic and specific patents is involved.
3. Where the question of Office practice is involved.

It has unfortunately proved to be impossible to make any large collections of decisions upon the same point. In fact, the decisions appear in many cases to be at variance and thus the subject can not be so bounded that only the cases within the bounds will be held to involve double patenting. The conflict in the courts is well illustrated by the treatment accorded to patent 495,443 and the reissue 11,872 thereof. These patents granted to C. J. Van Depoele were directed to an improvement in an overhead switch and a contact device

for use therewith. While the application for the original patent was pending, a divisional application was filed and became patent 424,695, the earlier filed application being delayed by reason of an interference. The claims in the later patent covered the structure claimed in the earlier patent except that a certain pressure element was not included.

The decisions of the courts turned upon the consideration paid to the pressure element. This element was found to be essential and thus necessarily included in order that the first patent claim a complete structure and hence the second patent was held void under the rule against double patenting in:

- Thomson Co. vs. Sterling Meaker Co., 171 F. R., 111 (C. C. of N. J.).
Thomson Co. vs. Hoosick Co., 82 F. R., 461; 80 O. G., 967 (C. C. A., 2d Cir.).
Thomson Co. vs. Union Co., 86 F. R., 636; 83 O. G., 597 (C. C. A., 2d Cir.).
Thomson Co. vs. Jeffrey Co., 101 F. R., 121 (C. C. A., 6th Cir.).

The original patent was sustained in Thomson Co. vs. Winchester Co., 71 F. R., 192; 730 O. G., 2155 (C. C. of Conn.), on the ground that it was delayed in the Office by interference through no fault of the inventor.

Since the weight of decisions was against patent 495,-443, the inventor applied for and obtained the reissue patent in which the pressure element was expressly disclaimed. The Circuit Court of New York (N. D.) in Thomson Co. vs. Black Co., 124 F. R., 495, held the reissue void since the claims could not be construed to cover the same invention as the claims of the earlier patent. Upon appeal the reissue was held valid as for a subcombination. Thomson Co. vs. Black Co., 135 F. R., 759 (C. C. A., 2d Cir.), but the same court later reversed itself and held the reissue invalid on the ground of laches and of undue breadth.

- Thomson Co. vs. Western Co., 158 F. R., 813 (C. C. A., 2d Cir.).

PATENTABLE DISTINCTION.

This class includes the only cases in which true double patenting occurs—that is to say, in which the question is, whether or not both patents claim the same invention. The examination must be directed to the claims as pointed out above. The decisions falling hereunder have been analyzed and certain rules evolved from the analysis are laid down supported by one or more decisions.

- a. Only a single patent may be granted for the same inventive idea.

*(N.) *Odiorne vs. Amesbury*, cited.

(N.) *Morris vs. Huntington*, cited.

(N.) *Smith vs. Ely*, cited.

(C.) *Miller vs. Eagle Mfg. Co.*, cited.

The fact that the claims of the two patents for the same inventive idea differ in language does not prevent the operation of the rule above stated.

(C.) *Underfeed Co. vs. American Co.*, 165 F. R., 65 (566,871, 595,837).

b. A valid patent can not be issued to an inventor for anything described in a former patent to himself if the application therefor was filed after the former patent had been issued.

Matthews vs. Flower, cited.

Barnes Co. vs. Walworth Co., 60 F. R., 605 (212,346, 233,393).

This is not the rule if the application was filed before the former patent had been issued.

Wheeler vs. McCormick, Fed. Cases, 17,499.

Fenton Co. vs. Office Co., 68 O. G., 1390 (437,833, 450,124).

Anderson vs. Collins, 122 F. R., 451.

Badische-Fabrik vs. A. Klipstein & Co., 125 F. R., 451.

Hillard vs. Fisher Co., 159 F. R., 439 (554,874, 580,281).

*(C.) Copending. (N.) Not copending.

c. Where no proper line is maintained between the claims in the two patents, only one is valid.

(N.) Thomson Elec. Co. *vs.* Western Co., 70 F. R., 69; 73 O. G., 1123 (223,659, 238,315).

(C.) Otis Co. *vs.* Portland Co., 127 F. R., 557 (359,551, 453,955).

(N.) American Co. *vs.* Economy Co., 162 F. R., 684 (433,686, 656,553).

d. A mere colorable variation of the combination claimed in the earlier patent is not sufficient ground upon which to base the grant of a second patent.

(N.) McCreary *vs.* Canal Co., 141 U. S., 467; 57 O. G., 1131—Dicta (125,684, 129,844).

e. A change of direction through which a device operates does not in itself involve invention.

(N.) Fassett *vs.* Mfg. Co., 62 F. R., 404; 64 O. G., 439 (347,338, 377,376).

f. A slight immaterial modification of the structure shown in the earlier patent does not amount to invention.

(N.) Root *vs.* Ry. Co., 42 F. R., 412 (193-, 757, 224,284).

If, however, the modification makes the device more nearly perfect a valid patent may be granted thereon.

(N.) Gilmore et al. *vs.* Vaughn, 216 F. R., 356 (943,759, 1,029,645).

g. The substitution for an element in the first patent of an element suggested as equivalent thereto in such patent or of an element known to be an equivalent thereto does not amount to invention.

(N.) Swift *vs.* Jenks, 29 F. R., 642 (255,353, 283,931).

(N.) *Ex parte Marstellar*, 18 Gour., 52-14 (785,562).

(C.) *Pieper et al. vs. Mfg. Co.*, 156 F. R., 672—Dicta (704,099, 721,229).

h. Adjustability of an element does not in itself involve invention.

(N.) *Doig vs. Machine Co.*, 122 F. R., 460 (276,639, 342,268).

i. Where the difference between the claims of the two patents is due solely to the recitation of function the second patent is invalid.

(C.) *Miller vs. Eagle Mfg. Co.* cited.

McComb vs. Brodie, Fed. Cases, 8708.

(N.) *Nat'l Co. vs. Interchangeable Co.*, 106 F. R., 693 (361,009, 480,194).

(C.) *Western Co. vs. Williams-Abbott Co.*, 108 F. R., 952 (309,617, 394,172).

If, however, the change in function is due to a slight change in construction both patents are valid.

(C.) *Western Co. vs. Empire Co.*, 131 F. R., 494 (392,386, 392,387).

j. A patent for an article produced by one process renders a second patent for the same article produced by a different process invalid.

(N.) *Reynolds vs. Paint Co.*, 68 F. R., 483 (348,995, 378,520).

k. Patents for the article, the process by which it is made and the machine by which the process is carried out are involved in three classes of decisions.

1. Articles and Process:

When the claims of the later process patent cover nothing more than the necessary or obvious

steps of effecting the article covered by an earlier article patent, the later process patent is void on the ground that the two patents are for the same invention, and the invention resides in the article rather than in the process.

(C.) *Mosler Co. vs. Mosler & Co.*, 127 U. S., 353 (281,640, 283,136).

(C.) *Oval Co. vs. Mfg. Co.*, 60 F. R., 285 (273,773, 278,828).

Ex parte Simonds, 44 O. G., 445.

A process patent, granted over two years prior to the date of application for a product patent, is a bar thereto.

(N.) *In re Griffith*, 187 O. G., 517 (580,344).

A comparison of these decisions would appear to show that the process patent becomes a bar if the two-year term has passed between the issuance of the patent and the filing of the product application and is thus viewed only as a printed publication.

2. Machine and Article:

A patent for the machine by which the article is made may or may not render the later article patent invalid according to the line of decisions the court elects to follow. The article patent is held invalid in—

(C.) *McKay vs. Jackmann*, 12 F. R., 615 (20,775, 29,562).

(N.) *Needle Co. vs. Needle Co.*, 32 F. R., 221 (43,772, 110,594).

While both patents are held valid in—

(C.) *McKay vs. Dibert*, 5 F. R., 587, 19 O. G., 1351 (20,775 supra, 29,562).

(N.) *Hatch vs. Moffitt*, 15 F. R., 252 (117,627, 129,338).

(C.) *Adrian Co. vs. Fence Co.*, 190 F. R., 195 (755,187, 774,210).

The last decision lays down the rule that where the article is not necessarily made by the machine both patents are valid. It would appear that this rule is a logical one and follows the one suggested above in connection with article and process patents.

3. Machine and Process:

In cases involving a machine patent and a later patent for the process, the weight of opinion appears to be that both patents are valid. As in similar cases the process application must be filed within two years from that date of issue of the machine patent.

The following hold both patents valid:

- (C.) McKay *vs.* Dibert, (20,775 *supra*, 29,561, cited).
- (N.) Eastern Co. *vs.* Standard Co., 30 F. R., 63; 41 O. G., 231 (231,642, 258,272).
- (N.) Eastern Co. *vs.* Nixon et al., 35 F. R., 752; 45 O. G., 1571 (231,642, 258,272, *supra*).
- (C.) Simonds Co. *vs.* Mfg. Co., 90 F. R., 201 (319,754, 419,292).

l. A single novel element can be made the basis for one patent only and a second patent thereon is invalid.

- (N.) Davis Co. *vs.* Elevator Co., 135 F. R., 119 (555,640, 694,534, 694,535).
- (N.) Washburn *vs.* Pin Co. (500,640, 517-, 084).

m. A patent having been granted for a certain novel element, a later patent for a combination, the novelty of which lies in the substitution of said element for another element in an old combination is invalid.

- (N.) Holmes Co. *vs.* Metropolitan Co., 35 F. R., 254 (110,362, 120,874).
- (C.) Underwood *vs.* Gerber, 149 U. S., 224; 63 O. G., 1063 (348,072, 348,073).

- (C. & N.) Palmer Co. *vs.* Lozier, 90 F. R., 732 (489,714, 493,220; 495,975, 539,224).
 (C.) American Co. *vs.* Mfg. Co., 109 F. R., 976 (233,969, 463,569).
 (C.) Western Co. *vs.* Telephone Co., 148 U. S., 857 (574,006, 669,708).

n. A patent for a combination of a certain novel element with old elements is void in view of an earlier patent for the same novel element in combination with other old and well-known elements.

- (C.) Industrial Co. *vs.* Wilcox Co., 112 F. R., 535 (263,467, 341,790).
 (C.) Dey Co. *vs.* Syracuse Co., 152 F. R., 440 (522,784, 524,102).

o. Certain decisions which hold that two patents having for their point of novelty the same element, are both valid, appear to be at variance with the last three rules laid down and are taken up a little more in detail.

(N.) Oahn *vs.* Wong-On, 19 F. R., 424; 27 O. G., 299, in which the later patent claimed a combination of fewer elements than the earlier patent.

(C.) Palmer *vs.* Brown, 92 F. R., 925, in which patent 308,981 claimed the special use in a quilting machine of a specific mechanical movement claimed in patent 304,550.

(N.) Ryan *vs.* Newark Co., 96 F. R., 100, in which patent 251,630 claimed fewer elements than patent 237,586 and also claimed a new function for one of the common elements.

(C.) Spear *vs.* Keystone Co., 131 F. R., 879, in which patent 399,944 claimed a single element while 413,464 claimed the combination of that element with others to form a complete device.

(C.) *Dodge Co. vs. New York Co.*, 159 F. R., 976
(*Dicta*),

in which patent 688,111 claimed in addition to the novel element of patent 666,960 certain old elements in combination—this is squarely contrary to Rule *m* and is based upon the ground that the claims were not co-extensive.

p. An inventive idea may be patented as a design or an as article, but not as both.

(N.) *Cary Co. vs. Beal.*, 90 F R., 725,

where article patent 450,753 was granted prior to design patent 28,142.

(N.) *Williams Co. vs. Neverslip Co.*, 136 F. R., 210, where design patent 29,793 was granted prior to article patent 666,583. This last decision may be held to overrule.

(N.) *Collender vs. Griffith*, 2 F. R., 206,

based upon a similar state of facts wherein article patent 145,787 was held valid over design patent 4973 on the ground that the former patent was directed to structure and the latter to appearance.

GENERIC AND SPECIFIC PATENTS.

This class goes beyond the true idea of double patenting, as set forth in the first class, and is included under that subject upon the theory that the later patent if held valid would tend to extend beyond the statutory period, the monopoly to which the inventor is entitled. This theory appears unquestionably to be based upon strict justice and if followed in all cases would remove a great deal of doubt as to the validity of patents and obviate much litigation. The patents falling under this class may easily be divided into three groups according to the order in which the patents were issued, the order of filing being disregarded, as immaterial, except when the question of laches or fraud arises.

1. Where both patents are issued simultaneously. Here there would appear to be no question but that the only decision found correctly holds both patents valid.

Manhattan Co. vs. Helios-Upton Co., 135 F. R., 785.

2. Where the generic patent is issued before the specific patent. Here too the decisions found state what appears to be the only possible conclusion, that both patents are valid,

Victor Co. vs. American Co., 145 F. R., 350 (534,543, 564,586).

Welsbach Co. vs. Cohn, 181 F. R., 122 (638,004, 659,617).

Horton Co. vs. White Co., 213 F. R., 471 (863,120, 886,022).

3. Where the generic patent is issued after the specific patent. Here there is a great conflict of decisions. The courts have followed no fixed precedent but have considered each case independently. The result is therefore a lack of uniformity between the decisions of the same court upon different patents and of different courts upon the same patent.

The decisions in this class may be grouped into two subclasses: Those in which the generic claims of the later patent were held invalid and those in which the same were held valid; and each subclass separately considered.

The first subclass contains the three following decisions:

Sickels vs. Falls Co., 4,199, cited:

In this case the application for the generic patent was not filed until the specific patent had been granted.

Morse Co. vs. Link Co., 164 F. R., 331 (736,999, 757,762):

This decision was based upon a judgment of non-infringement and the suggestion of the court that the generic patent should be held invalid is mere dictum.

Union Co. vs. Smith Co., 181 F. R., 966 (470,990, 481,477):

The patent 470,990 was issued March 15, 1892. One week before the issue of the first patent the application for the second patent was filed and three months thereafter, Claims 37 and 38 were inserted in the second application which the court held were for the same subject-matter as was included in Claims 1 and 2 of the earlier patent, and could have been made in the earlier case. Claims 37 and 38 of the later patent 481,477 were held void. It was suggested that the applicant might secure Claims 37 and 38 by way of a reissue of the earlier patent, 470,990.

The second subclass in which the generic claims of the later patent are held valid includes a large group of decisions in which the application for the generic patent was delayed in the Patent Office by interference, while a later filed application for an improvement thereon becomes a patent. This practice laid down in 1870 has been consistently followed by the courts and as previously stated, has been approved by the Supreme Court. The following decisions have sustained the claims of the later patent on this ground:

Singer vs. Braunsdorf, 12,897 Fed. Cases (16,030).

Electrical Co. vs. Brush Co., 52 F. R., 130; 61 O. G., 886 (260,653, 337,298).

Thomson Co. vs. Elmira Co., 71 F. R., 396; 74 O. G., 144 (397,451, 424,695).

National Co. vs. Wheeler Co., 79 F. R., 432; 74 O. G., 1588 (402,610, 447,791).

- Thomson Co. vs. Ohio Co., 80 F. R., 712; 80 O. G., 654 (397,451, 424,695).
 Allington Co. vs. Glor, 83 F. R., 1014; 82 O. G., 189 (370,021, 403,362).
 Tesla Co. vs. Scott, 97 F. R., 588 (445,207, 555,190).
 Westinghouse Co. vs. Dayton Co., 118 F. R., 562 (416,193, 511,559, 511,560).
 Electric Co. vs. Buffalo Co., 120 F. R., 672 (337,299).
 Westinghouse Co. vs. Electric Co., 142 F. R., 545 (416,193, 511,559, 511,560).
 Thomson Co. vs. Illinois Co., 143 F. R., 534 (397,451, 424,695).
 Century Co. vs. Westinghouse Co., 191 F. R., 350 (416,193, 511,559, 511,560).

In addition to the above group certain other decisions are included in this subclass for which no common bond can be found. While in each decision the generic patent is sustained the reasons, given or assumed therefor, vary. The decisions are as follows:

McMillin vs. Rees, 1 F. R., 722; 17 O. G., 1222 (52,730, 63,917):

The court in this case construed the broad claim in the second patent so as not to cover or include the structure shown in the first patent.

Graham vs. Manufacturing Co., 11 F. R., 138; Graham vs. McCormick, 11 F. R., 859:

These decisions involve the same patents, i. e., 67,041 and 74,342. The generic patent held valid was granted on the second filed application. Originally the broad claims were in the first-filed application but were later transferred to the second application and the former became the limited patent.

Victor Co. vs. American Co., 140 F. R., 860 (534,583, 564,586):

The generic application was the second filed but issued before the specific patent. The court

held that a patent is not invalidated by the fact that the invention claimed was described but not claimed, in an earlier application by the patentee on which a patent was issued after the one in suit.

Washburn Co. vs. Beat 'Em All Co., 143 U. S., 275; 58 O. G., 1555 (150,683, 157,124):

There was no undue delay—about six months—and the broad claims had been in the first-filed application which became the second patent. The patents are directed to different inventions, the first to a wire stretcher for fences in which the fence invented by applicant is incidentally shown and the second to the fence itself.

Cleveland Co. vs. Detroit Co., 131 F. R., 853 (475,401):

The generic patent was delayed in the Office by reason of an appeal from the examiner's refusal to allow the claims. Although the applicant was responsible for the delay since he had instituted the appeal, the court held the patent valid apparently by analogy with the cases which come under the interference group referred to above.

OFFICE PRACTICE.

The various classes of double patenting having been reviewed in the light of the decisions wherein two patents are involved, the manner in which applications that may involve this question should be handled in the Patent Office is now to be considered.

1. There is no limit to the number of applications an inventor may file and keep pending in the Office showing and describing the same invention. If the claims overlap the Examiner should call the applicant's attention to the fact but take no further action until one application is in the issue or patented. When such a condition arises that application or patent may be used as a ground for rejecting overlapping claims or

claims for matter not patentably allowable over that claimed in the allowed application or patent. The copending applications must be either restricted or abandoned.

- Ex parte Langlois, 14 O. G., 84.
- Ex parte Gaboury, 37 O. G., 217.
- Ex parte Feister, 53 O. G., 1089.
- Ex parte Cahill, 63 O. G., 1815.

2. The second class of cases laid down by Commissioner Mitchell in *Ex parte Mullen and Mullen*, i. e., where there is a proper line between the claims of the application, the matter of which may be covered by the same or different patents, emphasizes the practice laid down in:

- Ex parte Long, 25 O. G., 1189.
- Ex parte Rohn, 25 O. G., 1190.
- Marvin vs. Lillie*, 27 O. G., 299.
- Hill vs. Comm'r of Patents*, 4 Mackey, 266; 33 O. G., 757.

The requirement that matter not claimed in the original application must be claimed in an application copending therewith or in a reissue is based upon the theory that the grant of a patent constitutes a dedication to the public of the matter embraced or described and not claimed therein, which dedication can only be rebutted in the ways referred to above.

The decisions in *Ex parte Derby*, 26 O. G., 1208, and *Vermont Co. vs. Marble, Comm'r*, cited,

which hold such matter claimable in a new application if filed within two years after the grant of the patent, as well as the decisions in:

- Ex parte Cottrell, 9 O. G., 495,
- Ex parte Arkell, 9 O. G., 1111, and
- Ex parte Roberts, 40 O. G., 573,

which hold that such matter can not be claimed in a copending application but only in a reissue

of the patent are discordant notes finally silenced by Mullen and Mullen.

Subsequent to Mullen and Mullen, the practice has followed the rules laid down in—

Ex parte Wellman, 86 O. G., 1986.

Ex parte Osborn, 92 O. G., 1797, and

Ex parte Davidson, 93 O. G., 191,

which hold that a rejection upon this ground is appealable to the Board of Examiners-in-Chief.

3. Where there is no patentable line between two sets of claims only one patent should be allowed.

Durham *vs.* Seymour, 6 App. D. C., 78.

Closet supported by floor rather than by wall:

Ex parte Creveling, 25 App. D. C., 530.

Claims in process case differ from those in machine case merely by use of "method" instead of "means."

Ex parte Holt, 29 O. G., 171.

Ex parte Barclay, 21 Gour., 56-23, 1909.

No line between copending applications.

Ex parte Ranson, 39 O. G., 119.

Ex parte Edison, 54 O. G., 263.

Later-filed case without proper line of division.

Ex parte Parker, 19 Gour., 3-10, 1907.

Mere substitution of one well-known form of gearing for another.

Ex parte Richards, 19 Gour., 40-23, 1907.

Element *per se* not patentable over combination depending thereon for novelty.

Ex parte Schoen, 20 Gour., 24-19, 1908.

Gear wheel not patentable over car wheel made by same process.

4. Claims in a patent can not be inserted in an application by the same inventor.

Ex parte Barrett, 56 O. G., 930.

5. Where broad claims have been included in a patent, overlapping broad claims can not be inserted in an application by the same inventor although the applications were copending. The fact that the claims were inserted upon the suggestion of the Examiner has no bearing upon this holding.

Jones *vs.* Larter, 92 O. G., 383.

6. The above decision leads to a discussion of the practice to be followed when the question arises as to the treatment of a generic application, the claims of which dominate a specific patent granted to the same inventor upon a copending application. As indicated above in connection with generic and specific patents there are decisions both pro and con.

The following hold that the specific patent is a bar to the allowance of the generic application:

Ex parte Atwood, 1869, C. D., 98.

Ex parte Lowe, 1870, C. D., 39.

Gold *vs.* Gold, 187 F. R., 273.

In the first and third cases the applications were not copending; in the second case the claims in the application were so broad as to amount to claims for the principle of the machine already covered by the patent.

The specific patent is held no bar to the grant of the generic patent in,

Ex parte Emerson, 17 O. G., 1451; and

Ex parte Edison, 49 O. G., 1691.

In the first case the inventor was permitted to insert broad claims in an application after the specific application had become a patent on the ground that an inventor can not be required to claim in a single patent or a reissue thereof, each invention shown and described. This decision would appear to be bad law under the practice laid down in Mullen and Mullen. In the second case the generic application was delayed in the Office through interference, although filed prior to the application on which the specific patent was granted, and hence comes under the exception allowed in such cases as approved by the Supreme Court. The Commissioner in deciding this case took occasion to state that the delay was not the fault of the inventor but was due either to an inherent defect in the patent system or to a defect in the administration of the system.

An unpublished decision by Commissioner Spear, found in the file of patent 209,006 to W. G. A., Bonville covers a situation which seldom arises in connection with this question. The application for that patent which contained generic claims was filed in 1871 and later assigned. A later application by the same inventor for an improvement thereon was filed in 1873 and matured into patent 199,779 which was unassigned. After the grant of this patent the earlier application delayed by interference was rejected thereon since the patent showed the structure claimed in the application. The Commissioner reversed the Examiner and allowed the claims on the ground that such practice would result in unjustly depriving the assignee of his rights.

None of the above decisions squarely decides whether or not in the ordinary case the grant of a specific patent on one species constitutes a bar to the grant of a patent upon a copending application showing structure not covered by the claims of the specific patent but containing generic claims readable upon the form shown in the

patent. The Board of Examiners-in-Chief held that W. S. Elliott was entitled to broad claims in an application filed June 27, 1910, although an application filed February 10, 1910, had become a patent October 25, 1910, with specific claims. This holding was based upon the decisions in,

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Ex parte Edison, 49 O. G., 1691; and
Thomson Co. vs. Ohio Co., cited.

In each of these cases the generic patent was first applied for and was delayed by interference in the Office while a later application for an improvement thereon became a patent. It would seem, therefore, that the conditions were not analogous. It may be of interest to note here that the courts have never definitely decided just what rights the public has to an expired specific patent which is dominated by an unexpired generic patent to the same party. No cases have been found in which the validity of the patent was decided on this point, although several courts have discussed the subject academically and reached different conclusions. In Thomson Houston Co. vs. Ohio Brass Co., the court, by way of dicta, stated that apparently the public is not entitled to the subject-matter of the specific patent until the later generic patent had expired, while in Thomson Houston Co. vs. Illinois Co., 143 F. R., 534, a motion for preliminary injunction on the specific patent was refused on the ground that the alleged infringing structure was the same as that disclosed in the expired specific patent, which the court seemed to assume was free to the public, although embraced by the claims of the unexpired generic patent, and also on the ground of implied license. The Circuit Court of Appeals (152 F. R., 632) affirmed this decision on the ground of implied license alone.

A careful review of the foregoing authorities would indicate that, where there are two or more copending applications disclosing the same generic invention, the generic claims, wherever practicable, should be in the first application filed and should be the first patented unless delayed in the office by reason of interference. If the generic claims are placed in a later-filed application,

such later-filed application must be the first one patented (see *Victor Co. vs. American Co.*, cited). This, as well as other departures from the rule set forth above, and apparently sustained by the courts in the cases cited, should not be sanctioned by the Office except upon a showing of good and sufficient reasons. For, as stated by Commissioner Fisher, in *Ex parte Atwood* (cited): "It must be remembered that when the patent has been granted, and its validity has been called in question, a court may so far respect the action of the Commissioner, and the grant of the Government, as to adopt a rule, to save and sustain the patent, which it would be very unwise and unsafe to adopt as the uniform practice in granting patents." Should the above rule be consistently followed, it would eliminate at least one factor in the problem of Double Patenting without sacrificing any of the rights of the inventor.

December 7, 1916.

Scope of the Phrase "Described in a Printed Publication"

As presented November 2, 1916, before the Examining
Committee of the United States Patent Office

ANDREW W. HARRIS,
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WASHINGTON, D. C.
1916

Scope of the Phrase "Described in a Printed Publication"

By

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Among the negative conditions enumerated in Revised Statutes, Section 4886, the existence of which is required before an inventor can secure the grant of a valid patent, is that the invention for which protection is sought shall not have been "described in any printed publication in this or any foreign country before his invention or discovery thereof or more than two years prior to his application."

Therefore, in order to determine the patentability of an invention, it is necessary to ascertain what is meant, in the statutes, by the words "described," "printed," and "publication."

DESCRIBED.

The means most frequently employed to describe an invention are words, usually assisted by reference to drawings. Occasionally, however, such description consists in a drawing alone.

Since words, signs and symbols are merely the vehicles by which thought is transmitted from one individual to another, the first controversy that may arise in considering an alleged description of an invention is whether or not the inventive thought in question is actually transmitted by the said description.

A certain description of an object may be entirely incomprehensible to one person, partially understood by another, and perfectly comprehended by a third. The question, therefore, arises to what class of persons

must the alleged description convey the inventive thought; and to what extent must it be conveyed.

In the case of *Plimpton vs. Malcomson* (decided before a British tribunal, but quoted with approval by various United States courts), it is stated:

"But there are various kinds of people who know something about it. If it is a mechanical invention, as this is, you have, first of all, scientific mechanicians of the first class—eminent engineers; then you have scientific mechanicians of the second class—managers of great manufactories, great employers of labor, persons who have studied mechanics—not to the same extent as the first class, the scientific engineers, but still to a great extent—for the purpose of conducting manufactories of complicated and unusual machines, and who therefore must have made the subject a matter of very considerable study; and in this class I should include foremen, being men of superior intelligence, who like their masters would be capable of invention, and like the scientific engineers would be able to find out what was meant even from slight hints, and still more from imperfect descriptions, and would be able to supplement, so as to succeed even from a defective description, and even more than that, would be able to correct an erroneous description. That is what I should say of the first two classes which I will call the scientific classes. The other class consists of the ordinary workman, using that amount of skill and intelligence which is fairly to be expected from him—not a careless man, but a careful man, though not possessing that great scientific knowledge or power of invention which would enable him by himself, unaided, to supplement a defective description, or correct an erroneous description."

The alleged anticipating description must be such as will convey the inventive thought completely to the ordinary workman employed in the art to which the invention relates; but need not be such as will convey the

invention to one unacquainted with the art in question.

Each art or industry employs ordinary workmen to perform various specific tasks; and each workman is usually confined to his own particular duty, and gains no knowledge of the industry as a whole by reason of his employment therein. It is necessary, therefore, in selecting the workman whose intelligence is to be the criterion, to choose him from the ranks of those employed in the particular duty to which the description relates.

For example, if the description related to a plan or design for a machine or engine, the workman whose intelligence and knowledge is to be the criterion should not be selected from those engaged in manipulating the various members of which the machine is composed, but from those whose duties involve the contemplation of the machine as a whole; such as a draftsman or designer.

Where the alleged description is verbal, either with or without the assistance of a drawing, the only controversy that can arise is as to the sufficiency of the description to convey the inventive thought to the ordinary workman engaged in the art to which the invention relates. This is a question of fact, to be decided in each individual case by the circumstances peculiar thereto; and as to which no legal principle of general application can be enunciated. In each individual case one's decision as to the sufficiency of a description is controlled by his conception of the intelligence possessed by an ordinary workman.

Such conception is influenced to some extent by interest in the result following a decision. Doubtless an examiner sometimes attributes to the workman a degree of intelligence beyond that usually possessed by one of that class. On the other hand, if the typical workman possessed only the intelligence frequently attributed to him by applicants, he would soon become a charge upon the public.

Controversy has arisen as to whether or not a disclosure made by a drawing alone can be regarded as a legal description.

It seems evident that Section 4886 of the Revised Statutes does not sanction the grant of a patent covering

an alleged invention, knowledge of which was accessible to the public prior to the conception thereof by the alleged inventor. Therefore, if the spirit of the law be followed, the term "described" as used in the statutes should be interpreted to include all printed or published means whereby knowledge of an alleged invention can be communicated.

However, in several cases pending in Division 28, in which were cited references consisting of a drawing alone, the invalidity of such references was strongly urged on the authority of several judicial decisions and on the contention that the word "described," as used in the patent statutes, necessarily implied the presence of verbal disclosure.

The word "described," as defined by standard authorities, means:

(1) To represent by drawing; to draw a plan of; to delineate; to trace or mark out.

(2) To represent by words written or spoken; to give an account of; to make known to others by words or signs.

The first group of definitions, it was argued, referred to the physical act of making a drawing. For example, to describe a circle.

The error in this reasoning, however, lies in the fact that "represent" means "to show," "to set forth." Therefore "to represent by drawing" means to show or set forth by drawing.

The second group of definitions, of course, does not cover a disclosure made by drawing alone, unless the term "sign" can be interpreted to cover a drawing.

The judicial decisions alleged to indicate that a drawing alone is not a valid disclosure will be discussed in their chronological order. They are the following:

Judson vs. Cope, 1 Fisher, 615 (S. Dist. Ohio, May, 1860):

This was a suit for infringement of a patent. The defense offered was lack of novelty in view of certain printed publications, among which was a German work consisting only of plates or drawings without verbal description.

Objection was made against the validity of this publication; and the court said:

"I suppose it is not a matter of much importance in this case, but I should hesitate very much to accept a mere drawing, unaccompanied by any description whatever. I think it not admissible under the present notice."

The court did not state why it hesitated to accept the drawing alone, nor why it was a matter of no importance. It is reasonable to suppose that the court thought that the drawing was too obscure to disclose the invention. Certainly if the court had intended to enunciate the broad principle that a drawing alone was insufficient to disclose an invention, it would not have stated that it was a matter of no importance. This decision, therefore, can not be taken to establish the doctrine that a published drawing alone can never constitute an anticipation.

Reeves vs. Keystone Bridge Co. (U. S. Cir. Ct., E. Dist. of Pa., 1 O. G., 466—1872):

This was a suit for the infringement of a patent. Among other defences offered, it was alleged that the invention covered by the patent was anticipated by a certain publication known as the "Dreyfus Album," which album consisted of drawings alone.

Referring to this album, the court said:

"It contains an illustration, by a drawing, of the thing intended to be represented, without verbal description; and whether this is a description at all or such a one as the act contemplates may well be denied on the authority of *Seymour vs. Osborn* (11 Wallace, p. 516) and the cases referred to therein with approval. But it is unnecessary to decide this question as the proof is deficient in another essential particular—it is not shown that the work was published before the date of the complainant's patent."

This decision expressly avoids a decision on the question here at issue. Furthermore, an examination of the

record in the case of Seymour *vs.* Osborn discloses no foundation for the dictum of the court relating to the validity of disclosure by drawings alone. The case of Seymour *vs.* Osborn in no way referred to this question. Consequently the case of Reeves *vs.* Keystone Bridge Co. can not be regarded as bearing on this subject.

In re Atterbury (C. D., 1876, page 79):

This case presented facts almost identical with those in the case of Reeves *vs.* Keystone Bridge Co.; and Commissioner Spear quotes with approval the opinion of the court in that case. However, a direct decision on the question at issue is again avoided, since the alleged anticipating drawing had no date of publication.

New Process Co. *vs.* Koch (C. D., 1884, page 421):

This was a suit for the infringement of patent 215,679, May 20, 1879, to Meller & Hoffman.

One of the defences was that the patent was anticipated by a certain patent to Pfaudler, issued July 2, 1878.

The assignees of the Pfaudler patent conducted the defense; and the court treated the case as a contest for priority of invention between the two patentees, rather than as a suit for infringement.

Meller & Hoffman, who were foreigners, endeavored to establish the date of introduction of their invention into the United States by certain circulars sent to persons engaged in the brewing trade, and with the view of introducing the Meller & Hoffman process into use here.

As to these circulars, the court said:

"It is attempted to carry the date of plaintiff's invention back to the time when the circulars were received, which was undoubtedly anterior to the time when Pfaudler had perfected his mechanism. But it seems to me there are two objections to these circulars. First, they do not describe the Meller & Hoffman device with that clearness and certainty which the law requires for an anticipation. . . . Now, referring to the second circular which is much the fuller of

the two, Meller says that (here follows the contents of the circular; which need not be quoted). This is all there is in the circular by way of specification. It is true that annexed thereto is an incomplete drawing which might possibly, to a skilled workman, give an idea as to the real construction of the device, but tested by the definition found in the two cases above cited, it seems to me to fall considerably short of the particularity required in a patent or in a publication claimed to anticipate a patent. . . . It has been frequently held that drawings alone, unaccompanied by letter-press description, will never invalidate a patent. In re Atterbury, Judson *vs.* Cope, Reeves *vs.* Keystone Bridge Co."

It appears from the above that the question under consideration was not involved. No reference consisting of a drawing alone was present in its record. Furthermore, even though such a drawing had been offered, the question to be decided by the court was whether or not it introduced knowledge of the invention into this country. The question as to whether or not the evidence offered was a publication was not involved, since it might have been sufficient to introduce knowledge without being a publication.

The court, therefore, in this decision, had no occasion to pass on this question; and its observation relative thereto was in reality an uncalled for dictum. It is to be observed also that this dictum was based on supposed precedents which, as above shown, fail to support it.

Decisions upholding, or tending to uphold, the validity of disclosures by a drawing alone are found in—

Ex parte Borden, C. D., 1884, p. 9.

Wright vs. Yuengling, C. D., 1894, p. 560.

American Writing Mach. Co. vs. Wagner Type-writing Mach. Co., 151 F. R., 576.

Millet & Reed vs. Dvell, C. D., 1901, 410.

Ex parte Borden:

In the case of *ex parte Borden*, the examiner had cited as a reference a patent, the drawing of which

showed the alleged anticipating matter. It was not described in the patent.

Applicant petitioned the Commissioner to hold that a drawing alone without verbal description was not a valid description.

In his decision, Commissioner Butterworth said:

"But even without any description, if a published drawing fully and clearly exhibits and discloses an invention sought to be patented, it is an adequate and complete reference of itself alone. A good, clear, and distinct drawing of an invention is a higher order of evidence of the existence of the invention than any mere description thereof in words."

Wright vs. Yuengling:

This was a suit for the infringement of patent No. 144,818, to the plaintiff Wright. The structure covered by the patent was a frame for stationary engines in which the cross-head guide was made in the form of a cylinder. The front end of this cylinder was connected with the engine base by a semi-circular trough-like connection in which the connecting rod reciprocated; and this trough-like body formed an element in the combination covered by claim 2 of the patent.

The defense set up against infringement of claim 2 was lack of novelty in view of the prior art.

As to this prior art, the court said:

"The guiding cylinder, which is used in lieu of the ordinary parallel slides, was, however, by no means a novelty in the construction of engine frames. It is found in different stages of perfection in several patents. It is true that none of these patents exhibit distinctly the trough-like connection of the Wright patent, but that also is found in the patent to Chilion M. Farrar, in which it is fully shown in the drawing, *though not described in the specification*, and is used in connection with flat parallel slides. Wright's only invention, then, was in the combination of the cylindrical guide with the trough shown in

the Farrar patent. Did this accomplish a new and valuable result, it is quite possible that a patent therefor might have been sustained; but we do not find this to be the case. The cylindrical guide performs the same function as in the prior patents; and the trough, in which the connecting rod works in the Farrar patent, is practically the same as in the Wright patent, and the combination is a mere aggregation of their respective functions."

In this case, therefore, the court found that there was no invention in combining old elements; and the only evidence that one of these elements was old was a drawing without description. This is a Supreme Court decision; and was delivered by Justice Brown, who delivered the opinion, as a Circuit Judge, in the case of New Process Co. *vs.* Koch, above discussed.

American Writing Machine Co. *vs.* Wagner Typewriting Mach. Co.:

The subject-matter involved was a typewriter provided with an adjustable stop.

Defendant held that the patent was anticipated by a patent to Yost, granted April 23, 1889. The drawing of the Yost patent, and the model each showed the combination claimed; but the specification did not describe the adjustable stop. Oral testimony was offered as to the function of the stop shown by the drawing and model. The patent was held anticipated, but the court said:

"If the proof of prior invention was confined to the Yost patent or to the oral testimony alone, or to the model alone it would probably be rejected as insufficient; but the three united present one of the strongest cases of anticipation with which we are acquainted."

In this case, therefore, a patent was held invalid on an anticipating disclosure of which a written description formed no portion, and of which disclosure the only portion that was published was a drawing.

Millett & Reed vs. Duell:

In this case, an appeal had been taken to the Court of Appeals of the District of Columbia from a decision of the Commissioner of Patents refusing letters patent to the appellants. The ground upon which such refusal was based was that the invention sought to be covered was disclosed in a certain patent which was issued three days after the filing of appellant's application, but which patent was granted on an application filed before the filing of appellant's application. Furthermore, the disclosure was made in the drawing alone, and not described in the specification.

The court sustained the Commissioner; but since the patent was not cited as an anticipating publication, but as an evidence of prior knowledge, the court's decision is not pertinent to the question under discussion.

PRINTED.

So far as I have been able to ascertain, the meaning of "printed" has never been the subject of judicial consideration. This, doubtless, is due to the fact that at present the universal method of producing a publication is by imprints from type; and therefore such publications do not offer grounds for controversy. Discussion of this subject is somewhat academic; but since publications can be made by other processes than by imprints from type, it may be interesting to consider what forms of publication may be covered by the term "printed."

Standard authorities define "printed" as—

- (1) To fix or impress.
- (2) To stamp something in or upon; to make an impression or mark by pressure.
- (3) To strike off an impression from a set of type or the like.
- (4) To take a copy from a negative by the action of light upon a sensitized surface.

The popular conception of the term "printed" implies a copy of something produced by pressure, or by the action of light upon a sensitized surface.

Such a conception is, however, too narrow. It is obvious that the information conveyed by a publication

made by characters upon a surface is independent of the means by which such characters are placed upon the surface. Therefore to limit the term "printed" to the method by which characters are formed would be contrary to the spirit of the law.

Since a publication is any means by which information is given to the public, and may be made by words written or spoken or by signs, it would seem reasonable to infer that the framers of the statute intended "printed" to be interpreted as meaning "fixed" in contradistinction to such fugitive means as oral words and signs.

This interpretation of "printed" is warranted by the first definition above given—to fix.

It is also a popular conception that a printed publication appeals to the eye; but with the above indicated interpretation of the term, it could cover fixed means of communication appealing to other than the visual sense; such as publications for the blind and even phonographic records.

PUBLICATION.

A disclosure, although printed, is not a publication until measures are taken to place the description within reach of the public.

As stated in *Collier vs. Stimpson* (20 F. R., 906):

"Something more than printing is required. The statute goes upon the theory that the work has been made accessible to the public, and that the invention has been thereby given to the public, and is no longer patentable to any one. Publication means put into general circulation or on sale where the work is accessible to the public."

This same decision enunciates the principle that the date placed by the publisher on an alleged publication is not evidence that it was actually published on that date or in fact that it was published at all; but, to be regarded as a publication, it must be shown to have been made accessible to the public.

The extent, however, to which the public avail themselves of this accessibility is immaterial.

In order to be a valid publication, it must be made accessible to the whole body of the public; and not confined to any particular class. Thus, trade circulars issued only to those interested or supposed to be interested in a certain art are not publications (*Parsons vs. Colgate*, C. D., 1883-319). This decision and one or two others following it as a precedent, have, I believe, been misinterpreted to hold that such circulars can not become publications. In my opinion, if such a circular were made accessible to the public, it would then become a publication; and the fact that it had originally been addressed to a portion only of the public would not prevent its use from being so expanded as to embrace the entire public.

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An Applicant's Statutory Remedies from Adverse Decisions

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An Applicant's Statutory Remedies From Adverse Decisions

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An applicant's remedies from adverse decisions are many. They comprise, in succession, an appeal from the decision of the Primary Examiner or the Examiner of Interferences to the Board of Examiners-in-Chief, to the Commissioner and to the Court of Appeals of the District of Columbia, which may then be followed by a bill in equity under section 4915, Revised Statutes, in one of the United States district courts and an appeal to the proper circuit court of appeals.

The reasons and circumstances which caused the enactment of laws providing for this elaborate system of remedies are interesting.

The first statute providing an appeal from a decision in a patent application is contained in the Act of 1836, but a brief survey of our patent system as it existed prior to 1836 is instructive and will assist in understanding the system of appeals finally established.

The Act of 1790, creating the patent system of the United States, authorized the "Secretary of State, the Secretary of the Department of War and the Attorney-General, or any two of them, if they shall deem the invention or discovery sufficiently useful and important, to cause letters patent to be made out in the name of the United States, to be tested by the President of the United States." Thomas Jefferson was the Secretary of State while this act was in force. He is said to have inspired it, to have taken great pride in it and to have given personal consideration to every application. It

is related that when an application for patent was filed, he would summon Henry Knox, Secretary of War, and Edmund Randolph, Attorney-General, and that these three distinguished officials would examine the application with great care.

The granting of a patent at this time was quite an event in the history of the State Department where the clerical work of issuing the patent was performed. The law was construed to give this tribunal authority to refuse a patent if the invention did not come up to its standard of usefulness and importance. This tribunal was absolute in its authority and there was no appeal from its decisions. It is recorded that its members scrutinized the specifications and claims so critically and rigidly that most of the applications were rejected. Only three patents were granted during the first year and the total issue before the act was repealed in 1793 was only fifty-five. The severity of their examination and their lack of sympathy with inventors caused great dissatisfaction.

The Act of 1793, repealing the Act of 1790, took away this power of rejection and confided in the Secretary of State, alone, the duty of issuing patents. The certificate of the Attorney-General, however, was required as to the correctness of the forms and the signature of the President of the United States was still necessary. The patent issued as a matter of course if the application was in proper form and the required fee was paid. In other words, the issuing of patents was placed upon a recording or registration basis. This act also created a Board of Arbitration to pass upon interfering applications, one member of which was chosen by each of the applicants and one by the Secretary of State. Their decision was final and if either party refused to go into the arbitration, his opponent was given the patent.

It is recorded that for the twelve years prior to 1802, the entire work of the Patent Office was performed by a single clerk in the State Department and that all of the records filled but a dozen pigeon holes.

In 1802 Dr. Thornton was appointed a clerk in charge of the issuing of patents. Later he was given the title of "Superintendent." He was a man of scientific attainments and is one of the interesting characters connected

with the early history of our patent system. He exercised autocratic control over its affairs for twenty-six years.

Under the Patent Act of 1793 no investigation was made as to the novelty or utility of the invention, the oath of the applicant that to the best of his knowledge the invention was new, being accepted as sufficient. Under this practice, the patentee received his patent with only such assurance as to its validity as he might gain from his own investigation. Necessarily, the patent was of small commercial value. The total number of patents issued prior to 1836 was only nine thousand nine hundred and fifty-seven (9,957).

The Act of 1836 reorganized the Patent Office and inaugurated practically the present system of granting patents only after examination has shown the invention to be new and useful. This change in the patent system introduced by the Act of 1836 is referred to in the Patent Office Report for 1848, page 84, as follows:

Perhaps the most important feature of this law is that which relates to the examination to which applications are required to be subjected. Prior to its passage the examinations consisted merely in a comparison of the specification, drawings and model, to ascertain that they agreed together and with the claims made; but the law of 1836 required the examination to enter into the questions of novelty, utility, and priority of invention—a provision which largely added to the labors and responsibility of the office.

The Act of 1836 made the Patent Office a separate bureau of the State Department and provided a head therefor, designated the Commissioner of Patents. It provided also for a chief clerk, an examining clerk, two other clerks, one of whom was to be a competent draughtsman, a machinist and a messenger.

Section 7 of the Act of 1836 provides, *inter alia*, that when an application is filed—

. . . the commissioner shall make, or cause to be made, an examination of the alleged new invention or discovery; and if, on any such examination,

it shall *not* appear to the commissioner that the same had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that it had been patented or described in any printed publication in this or any foreign country, or had been in public use or on sale with the applicant's consent or allowance prior to the application, if the commissioner shall deem it to be sufficiently useful and important, it shall be his duty to issue a patent therefor. . . .

The words "sufficiently useful and important" are the identical words that were contained in the Act of 1790. In this respect it is, therefore, a return to the practice under the original Patent Act of 1790. It indicates that if the practice under the latter act had been unsatisfactory, the practice under the Act of 1793 had proved even more unsatisfactory. Instead of the three secretaries of departments, however, it is now the newly created official, the Commissioner of Patents, who was to pass upon the applications. Moreover, to prevent an arbitrary exercise of power certain restrictions were placed upon the authority of the Commissioner and an appeal was provided from his decisions. The system inaugurated by the Act of 1836 remains our system today with but few changes in its essential features. The machinery for carrying it into effect has been expanded and improved in an endeavor to keep pace with the enormous growth of business.

Section 9 of this act fixed the application fee for citizens of the United States and aliens who had resided here for one year, at \$30; for subjects of Great Britain, \$500, and for all other persons, \$300. No further or final fee was required and a rebate of \$20 was given if the application was withdrawn after rejection. Section 12 of the Act of 1837 fixed the amount returned to the applicant under these circumstances at two-thirds of the application fee. This schedule of rates remained in force until the Act of 1861 when the discrimination in favor of citizens of this country was abolished and the present schedule of fees was established.

APPEALS FROM ADVERSE DECISIONS OF THE COMMISSIONER.

The Patent Act of 1836 (5 Stat., 117) providing for a Commissioner of Patents and for an examination as to the novelty and utility of the invention, also provided for an appeal from the adverse decision of the Commissioner to a board of examiners. This board was to consist of three disinterested persons appointed by the Secretary of State, one of whom at least, was to be selected "if practicable and convenient, for his knowledge and skill in the particular art, manufacture or branch of science to which the alleged invention appertains." The applicant was required to pay a \$25 appeal fee. Each member of the board was to receive in each case a compensation not to exceed \$10. Section 8 of the act provided for interference proceedings between pending applications, or a pending application and an unexpired patent, and an appeal from the decision of the Commissioner on priority on like terms and conditions to those mentioned above.

The Act of 1839 (5 Stat., 353) substituted in place of this board of examiners, as the appellate tribunal, the Chief Justice of the District Court of the United States for the District of Columbia who was to be paid annually out of the Patent Fund in consideration of such duties, the sum of \$100. The reason for this change in the appellate tribunal is set forth in the report of the Commissioner of Patents for 1860, as follows:

But this board, temporary in its nature, its members being appointed for each occasion, and their services inadequately remunerated, experience proved to be an entire failure; and hence, by the eleventh section of the Act of 1839, it was abolished, and the appellate jurisdiction transferred 'to the chief justice of the District Court of the United States for the District of Columbia.' This was a step in advance. It was a decided improvement upon the original tribunal, and gave rise to no complaint, until the year 1850, when Chief Justice Cranch announced to this office that he was unable by reason of the infirmities of age, to discharge the duties imposed upon him by the acts of Congress.

Under the law of 1839 it was the duty of the Chief Justice, after a hearing of the case, to return the papers to the Commissioner together with a certificate of his proceedings and decision which the act directs shall be entered of record in the Patent Office and shall govern the future proceedings in the case.

The Act of 1852 (10 Stat., 75) provided that appeals from the Commissioner of Patents "may also be made to either of the assistant judges of the Circuit Court of the District of Columbia," and further provided "that in case appeal should be made to the said Chief Judge or either of the said assistant judges, the Commissioner of Patents shall pay to such Chief Judge or assistant judge, the sum of \$25 required to be paid by the appellant into the Patent Office." This act, giving concurrent jurisdiction to the assistant judges was passed by Congress on account of the infirmity of the Chief Justice.

As stated above, Chief Justice Cranch notified the Patent Office in 1850 that he was unable to hear any patent appeals on account of the infirmities of age. This continued until his death in 1855. The injurious consequences resulting from this state of affairs are set forth in the Commissioner's Report for 1860. It appears that in *ex parte* appeals, the appellant was unable to have his case heard, while in *inter partes* cases, the defeated party by an appeal was able to hold up indefinitely the issuance of the patent to the successful party. Even after the Act of 1852, the defeated party was able to do this by taking his appeal to the infirm Chief Justice. Commissioner Hodges attempted to prevent this injustice by ordering that where appeals had been taken to the Chief Justice, the appellants should transfer them to one of the assistant judges and that all appeals thereafter should be taken to one of the latter judges. Attorney General Cushing, however, held that the Commissioner had no authority to do this and that Congress alone had power to remedy the evil (6 Opinions, Attorney General, 39).

The reason for the change made by the Act of 1852 in the compensation allowed the judges from a hundred dollars a year to twenty-five dollars in each case is not clear. The evil resulting therefrom, however, is set

forth in the annual report of the Secretary of the Interior for 1857, as follows:

The appellant not only selects the judge who shall try the case, but also pays the fee of twenty-five dollars allowed him. The amount of compensation thus received will depend upon the number of cases brought before him; that number will inevitably be influenced by his course of decision. The judge is thus placed in a position of embarrassment, if not of humiliation, alike to be deplored by himself and the country.

This matter is again referred to by Commissioner Fisher in his annual report for 1869 where he recommends doing away with appeals to the court from decisions of the Commissioner of Patents and advances ten reasons in support of his recommendation. The fourth and eighth of these reasons read as follows:

(4) The allowance of a fee of twenty-five dollars for each appeal has a tendency to encourage appeals. When there are frequent reversals of the Office, attorneys are inclined to appeal from every decision; and the more frequent the appeal, the larger the aggregate of fees paid to the judge; in this connection, as a simple matter of fact, it may be mentioned that during the administration of my immediate predecessor, forty-two cases were appealed from him to one of the judges, and of these, thirty-eight were reversed and only four affirmed.

(8) Nine-tenths of the cases appealed involve mere questions of fact, upon which the judgment of the primary examiner is as likely to be correct as that of the Commissioner or judge.

Commissioner Fisher took a conspicuous part in framing the Act of 1870 and it was undoubtedly largely due to his recommendation that the appellate practice from the Commissioner's decisions, while not entirely abolished, was modified by that act.

Section 48 of the Consolidated Patent Act of 1870 (16 Stat., 198) provides:

- And be it further enacted,* That if such party, except a party to an interference, is dissatisfied with the decision of the commissioner, he may appeal to the Supreme Court of the District of Columbia, sitting in banc.

It should be noted that this act eliminated the appeal from the decision of the Commissioner in an interference case and provided for the hearing of the appeal in *ex parte* cases by the Supreme Court of the District of Columbia, sitting in banc, or general term, this court being the successor of the old Circuit Court of the District of Columbia.

Section 4911 of the Revised Statutes approved June 22, 1874, reads the same as section 48 of the Act of 1870.

The last change in the appellate tribunal having jurisdiction of appeals from decisions of the Commissioner is contained in the Act of February 9, 1893, creating the Court of Appeals of the District of Columbia (27 Stat., 434). This act vested in the above-mentioned court the determination of appeals from the Commissioner formerly vested in the general term of the Supreme Court of the District of Columbia. It also restored the appeal from the decision of the Commissioner in an interference case, which, as noted above, existed prior to the Act of 1870, by providing that "in addition any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said Court of Appeals."

This court construes the statute as permitting appeals from the decision of the Commissioner in interferences only in cases where there has been a final determination of priority, and holds that its jurisdiction is limited strictly to the question of priority. In numerous decisions it has refused to consider the patentability of the issue in an interference case or to entertain an appeal from a Commissioner's decision on any preliminary or interlocutory matter arising in the interference.

In *ex parte* cases the court holds that the right of appeal is confined to those cases in which an application

for patent has been finally denied by the Commissioner.

The jurisdiction of this court in patent applications is set forth succinctly in its decision, *In re Fullager*, 138 O. G., 259; 32 App. D. C., 222, as follows:

The jurisdiction of this court to entertain appeals from decisions of the Commissioner of Patents, in proceedings relating to patents, is limited to two classes of cases. The first is where the claims of an applicant for a patent, or the reissue of a patent, after having been twice rejected, have been finally rejected on an appeal to the Commissioner in due course of procedure. The second is where on an appeal to the Commissioner in an interference proceeding there has been a final decision of priority in favor of one of the parties thereto (R. S., secs. 4909, 4910, 4911; Westinghouse *vs.* Duncan, C. D., 1894, 170; 66 O. G., 1009; 2 App. D. C., 131, 132; Allen *vs.* Lowry, C. D., 1905, 643; 116 O. G., 2253; 26 App. D. C., 8, 17, 26; Union Distilling Co. *vs.* Schneider, C. D., 1907, 613; 129 O. G., 2503; 29 App. D. C., 1).

Examination of this decision shows that Fullager was involved in an interference with one Emmet; that in said interference a decision had been rendered by the Commissioner affirming the decision of the lower Patent Office tribunals dissolving the interference upon the ground that Fullager had no right to make the claims of the issue, since his verified showing was insufficient to warrant granting him a reissue patent. From the decision of the commissioner, Fullager attempted to appeal *ex parte* and the court held that it has no jurisdiction to entertain an appeal from a decision of the Commissioner on a motion to dissolve an interference under such circumstances.

In passing upon the question of its jurisdiction the court considers the effect rather than the form of the Commissioner's order or decision from which appeal has been taken. This is set forth in *Moore vs. Heany* (149 O. G., 831; 34 App. D. C., 31), where the court was considering whether an appeal would lie from a

Commissioner's order striking an application from the files, as follows: "A court would look to the substance, the necessary effect and operation of the order rather than to its formal recital merely."

Examination of a few cases will show how this principle has been applied by the court. These cases also show that although the court has indicated in the case of Fullager, *supra*, that its jurisdiction does not attach until after the case has been appealed in succession from the Examiner to the Examiners-in-Chief and to the Commissioner, decisions in the case by the tribunals below the Commissioner have not been uniformly insisted upon.

In the case of *In Re Selden* (164 O. G., 741; 36 App. D. C., 428), the claims had already been allowed by one primary examiner, and the application was ready for issue, subject to some slight amendments. Upon compliance by the applicant with these suggestions the successor of the first primary examiner called the case to the attention of the Commissioner and stated that he proposed to reject three of the twenty-four claims as not patentable. The Commissioner, upon consideration of the application, held it abandoned for lack of sufficient prosecution within the statutory period of two years.

An appeal from the Commissioner's decision was entertained, the court holding that the action of the Commissioner was in effect a rejection of the claims.

A similar holding was made by the court in the case of *Mattulath* (179 O. G., 833; 38 App. D. C., 497) where the Examiner's holding that an application was abandoned was affirmed by the Commissioner on petition from the Examiner's ruling.

In *Casper vs. Gold and Gold* (151 O. G. 194; 34 App. D. C., 198), the court dismissed an appeal taken from a decision of the Commissioner dissolving an interference because one of the parties had no right to make the claims of the issue, upon the ground that the decision of the Commissioner was interlocutory and not a final award of priority. After the return of the case to the Commissioner, he set aside his decision dissolving the interference and entered an award of priority. Upon an

appeal from that judgment the court entertained the same and passed upon the question of priority, notwithstanding no decision on the question of priority had ever been rendered by the Examiner of Interferences (*Casper vs. Gold and Gold; Casper vs. Gold*, 168 O. G., 787; 36 App. D. C., 302).

Townsend vs. Thullen (142 O. G., 1116; 32 App. D. C., 575), was a case where the Primary Examiner granted a motion to dissolve the interference as to certain counts on the ground that Townsend had no right to make them. His decision was affirmed by the Examiners-in-Chief and by the Commissioner. An appeal was taken to the court and was entertained, the court holding that the necessary result of the Commissioner's action was an award of priority to Thullen.

In the *New Departure Manufacturing Company, vs. Robinson* (188 O. G., 1056; 39 App. D. C., 504), the Examiner of Interferences directed the attention of the Commissioner to a prior interference and the Commissioner dissolved the interference upon the ground that the question of priority was *res adjudicata* by reason of the final decision in the prior interference. An appeal to the court was entertained, notwithstanding no decision in the proceeding had been rendered by any of the tribunals subordinate to the Commissioner.

In the case of *Moore vs. Chott* (192 O. G., 520; 40 App. D. C., 591), the Examiners-in-Chief reversed the action of the Primary Examiner rejecting the claims of the application. The Commissioner took up the case under his supervisory authority and refused the patent. The Court of Appeals of the District of Columbia held that the Commissioner acted within his authority and that the applicant's remedy was by regular appeal and not by a writ of mandamus. An appeal to the United States Supreme Court was dismissed for lack of jurisdiction (*Chott vs. Ewing*, 215 O. G., 1264; 237 U. S., 197).

In *Mann vs. Brown* (214 O. G., 1026; 43 App. D. C., 457) where an interference was appealed to the Commissioner and he dissolved the interference in view of a reference that applied to the party Mann and entered an order in his application refusing him a patent and

Mann appealed, the court held that the proceeding can not be changed from one statutory class to another and dismissed the appeal.

In *Carlin vs. Goldberg* (236 O. G., 1222) a motion to dissolve on the ground that Carlin's structure was inoperative had been granted by the various Patent Office tribunals. On petition of Carlin the Commissioner changed his decision to one awarding priority to Goldberg on the ground that Carlin had no right to make the claims. The court held that the Commissioner had no jurisdiction to convert an appeal on the motion to dissolve into an appeal on priority. It attempted to distinguish from the *Cosper vs. Gold* case, *supra*, by stating that in the latter case the interference had been tried and was ripe for an award of priority and that the issue of priority turned upon Cosper's right to make the claim, but that in the case at bar a reversal of the Commissioner would operate as a grant of priority to Carlin and Goldberg would be deprived of his day in court on that issue.

No appeal lies from the decision of the Court of Appeals of the District of Columbia on an appeal from the Commissioner of Patents (*Frasch vs. Moore*, 137 O. G., 230; 211 U. S., 1; *Johnson vs. Muesser*, 145 O. G., 767; 212 U. S., 283; sec. 250 of the Judicial Code, and *Chott vs. Ewing*, 215 O. G., 1264; 237 U. S., 197).

APPEALS TO THE EXAMINERS-IN-CHIEF AND TO THE COMMISSIONER.

The first statutory provision for appeals within the Patent Office is found in the Act of March 2, 1861, which provides for an appeal from the Primary Examiners to the Examiners-in-Chief and from the Examiners-in-Chief to the Commissioner. The reasons and the conditions in the Patent Office which led to the enactment of this statute legally creating the lower appellate tribunal and providing for appeals to the Examiners-in-Chief and to the Commissioner may well be considered together.

At the time of the passage of the Act of 1836 creating the Patent Office as a separate bureau of the State Department and for a long time thereafter, the amount of

business transacted by the Office was small and did not require the establishment of an appellate tribunal within the Office although, as heretofore noted, the act did provide an appeal from the decision of the Commissioner. For example, the number of applications filed in the year 1840 was 765 and the number of patents granted, 473. In fact, the establishment of the Patent Bureau by the Act of 1836, with an office force of seven persons, as stated above, was generally regarded as extravagant. At that time the number of applications was so small that the Commissioner was presumed to examine them himself or to have the examinations made directly under his eye by the examining clerk. For a long time thereafter, the amount of work was not too great for the Commissioner personally to supervise it.

The number of examiners did not exceed four until the year 1848, when the force was increased by the addition of two principal examiners and two assistant examiners. During this year the number of applications was 1,628 and the number of patents granted 660. The entire Patent Office was, therefore, about the size of one of the present forty-three examining divisions and the relation of the Commissioner to his examining force at that time is comparable to that existing at present between the principal examiner of a division and his assistant examiners.

The Patent Office was transferred from the jurisdiction of the State Department and made a bureau of the Interior Department upon the establishment of the latter in 1849. For a number of years prior to the establishment of the Agricultural Bureau, the Commissioner of Patents had charge of the collection of agricultural statistics and some of the Patent Office reports in the forties are filled principally with matter relating to agriculture. For some years the duty of registering copyrights was also added to the other duties of the Commissioner of Patents.

By 1853 the number of applications filed annually had increased to 2,673, and the Rules of Practice of the Patent Office for that year, page 16, states:

It is not often that the Commissioner is able to investigate a case in person, and only in very especial circumstances can he undertake it.

In the Rules of Practice issued February 20, 1854, first appeared the following rule:

114. Should there be—notwithstanding these reasons—a second rejection, the applicant may in person, or by his agent, or in writing, as above contemplated, bring the matter before the commissioner, who will, if possible, examine the case in person; but should he not be sufficiently at leisure, it will be referred to a board of examiners.

The decision attained in either of these modes will be final, so far as the action of this office is concerned. The only remaining remedy will be by appeal in those cases allowed by law.

Up to about this time apparently the Commissioner had endeavored to exercise a personal supervision over the actions of the examiners whether they were favorable or adverse to the grant of a patent. The annual report of the Commissioner of Patents for the year 1855, however, contains the following statement:

The multiplicity of business in the office renders it wholly impossible for the Commissioner to exercise a personal supervision over the decisions in each of the numberless cases presented for official action. When the Examiner reports in favor of granting a patent it is issued without further question or examination.

This annual report for 1855 contains the first suggestion of "the appointment of an examiner-in-chief, whose sole duty would be to review the actions of the present examiners with a view to introducing correctness and uniformity of decision."

Rule 114 of the Rules of Practice of 1854, quoted above, indicates that at this time the business of this Office had become so heavy that it was impossible for the Commissioner personally to review the actions of examiners in all cases brought to his attention and that he instituted a board of examiners to relieve him of some of this work. This board, which was the forerunner of

the board of examiners-in-chief, is referred to in the annual report of the Commissioner of Patents for 1857, as follows (pp. 7-8):

Whatever might be the capabilities of the Commissioner for physical and mental labor, it would be impossible for him to discharge the administrative duties of his office, and hear, in person, all the appeals brought before him from the decisions of examiners. The usage has hence grown up of referring the investigation of most of these appeals to a board constituted for the occasion, consisting of two or more examiners, who make their report to the Commissioner. As these boards lack permanence, and from necessity, indeed, have been constantly changing without a critical examination of each report by the Commissioner—which is not practicable—uniformity in action and in the assertion of principle can not be maintained. To prevent in future that conflict, which has been so often deplored in the past, it has been recommended that there shall be appointed a permanent board of three examiners-in-chief, who shall be charged with the duty of hearing and determining upon all appeals from the judgment of the primary examiners. Such a tribunal would, no doubt, attain the end sought, and the members of it—should their appellate duties not fully occupy their time—could, by the Commissioner, be assigned labor in the classes requiring such assistance with much advantage to the public service.

In the Patent Office Report for 1858, the Commissioner states (p. 5):

Since the month of November, 1857, a board temporarily organized, and consisting of three examiners, specially detailed for this duty, have been occupied in the examination of appeals from the decisions of the primary examiners to the Commissioner. During the past year they investi-

gated and disposed of 535 cases, in most of which they have submitted elaborately prepared reports. The results of their action have been eminently satisfactory, and have commanded, it is believed, the entire confidence of the country.

This matter is again referred to in the Commissioner's annual report for 1860 (p. 6), as follows:

Previous to the month of December, 1857, it was the practice of the Commissioner to hear appeals in person from the adverse action of the examiners; but it was soon found, from the natural increase of the business of the Office, that this was becoming a physical impossibility; and hence was adopted the alternative of deputing temporary boards of examiners, which, in some measure, relieved the Commissioner of the burden thrown upon him. But the plan soon developed its own imperfections. Each board had its own principle of action, and, in many instances, this differed from the rules prescribed by the Commissioner. As a corrective, it was at length determined by Commissioner Holt to establish a permanent board of appeal within the Office, whose members, three in number, should be taken from the examining corps, and whose duty it should be to examine all *ex parte* rejected cases, and submit their report and recommendation, as to their final disposal, to the Commissioner for his approval. This board has now been in existence for over three years, and the wisdom of its creation is a matter placed beyond all doubt.

The volumes of the Commissioner's Manuscript Decisions shows that the action of this board was in the form of a report which if satisfactory to the Commissioner, was approved and adopted by him.

The above excerpts from various reports of the Commissioner show that prior to 1861 the matter of ap-

peals to the Commissioner and later the reference of them largely to a board was not provided for by statute, but was a matter of usage or practice that gradually developed in the Office due to its growth and to the consequent inability of the Commissioner to attend in person to all the duties imposed upon him.

The repeated recommendations of the Commissioners finally produced the desired result and Congress provided for the board of examiners-in-chief and for appeals within the Office in section 2 of the Act of March 2, 1861 (12 Stat., 246) which reads as follows:

And be it further enacted, That for the purposes of securing greater uniformity of action in the grant and refusal of letters patent, there shall be appointed by the President, by and with the advice and consent of the Senate, three examiners-in-chief, at an annual salary of \$3,000 each, to be composed of persons of competent legal knowledge and scientific ability, whose duty it shall be, on the written petition of the applicant for that purpose being filed, to revise and determine upon the validity of decisions made by examiners, when adverse to the grant of letters patent; and also to revise and determine in like manner upon the validity of the decisions of examiners in interference cases, and when required by the Commissioner in applications for the extension of patents, and to perform such other duties as may be assigned to them by the Commissioner; that from their decisions appeals may be taken to the Commissioner of Patents in person, upon payment of the fee hereinafter prescribed; that the said examiners-in-chief shall be governed in their action by the rules to be prescribed by the Commissioner of Patents.

Section 10 of the act fixed the fee for an appeal from the examiners-in-chief to the Commissioner at twenty dollars but no fee was required on an appeal from the examiners to the examiners-in-chief.

The report of the Commissioner for 1865 contains the following recommendation for a ten-dollar fee on appeal to the examiners-in-chief:

The Act of March 2 1861, provided for the appointment of a board of examiners-in-chief, whose duty it should be to revise and determine upon the validity of decisions made by examiners when adverse to the grant of letters patent. An experience of five years has fully confirmed the wisdom of the enactment, but it has at the same time demonstrated the necessity of additional legislation upon the subject. While a fee of twenty dollars is charged upon an appeal from the examiners-in-chief to the Commissioner, no charge is made for an appeal from the examiners to the board. It results from this that appeals are taken in many cases without a shadow of ground, and, in contested cases, merely for the purpose of delay. During the year 1865 there were 495 appeals taken to the board, of which number 166 remained undisposed of at the close of the year. If a fee of ten dollars were charged on appeals to the board it would check the number of frivolous appeals, and would be gladly paid by those inventors who are confident of the justice of their claim, as they would recognize it as securing them an early decision in place of the delay of months to which they are now so generally subjected.

After consultation with many inventors, and with solicitors in extensive practice, I am satisfied that the proposed amendment would be received with almost universal favor.

This recommendation resulted in the Act of June 27, 1866 (14 Stat., 76) fixing the fee for such appeal at ten dollars.

The Act of 1870 and the Revised Statutes contain similar provisions and no material change appears until last year when Congress increased the number of examiners-in-chief from three to five (Act of Feb. 15, 1916).

BILL IN EQUITY UNDER SECTION 4915, REVISED STATUTES.

An applicant has still another remedy from an adverse decision; namely, by bill in equity. Provision for this remedy is first found in section 16 of the Act of 1836 which contained certain of the provisions now embodied in sections 4915 and 4918 of the Revised Statutes.

The first portion of section 16 of the Act of 1836 reads:

And be it further enacted, That whenever there shall be two interfering patents, or whenever a patent on application shall have been refused on an adverse decision of a board of examiners, on the ground that the patent applied for would interfere with an unexpired patent previously granted, any person interested in any such patent, either by assignment or otherwise, in the one case, and any such applicant in the other case, may have remedy by bill in equity.

At this time it will be recalled, the appellate tribunal to the Commissioner was a "board of examiners." The Act of 1839, which substituted for this tribunal the Chief Justice of the District of Columbia, also changed and enlarged the remedy by bill in equity. Section 10 of the Act of 1839 provides—

And be it further enacted, That the provisions of the sixteenth section of the before-recited act shall extend to all cases where patents are refused for any reason whatever, either by the Commissioner of Patents or by the Chief Justice of the District of Columbia, upon appeals from the decision of said Commissioner, as well as where the same shall have been refused on account of, or by reason of, interference with a previously existing patent; and in all cases where there is no opposing party, a copy of the bill shall be served upon the Commissioner of Patents, when the whole of the expenses of the proceeding shall be paid by the applicant, whether the final decision shall be in his favor or otherwise.

The provisions of this act are substantially the same as those of section 52 of the Act of 1870 and of present section 4915 of the Revised Statutes, except for the substitution of the "Supreme Court of the District of Columbia" in the latter in place of "Chief Justice of the District of Columbia" in the former. Since the Act of 1893, it is the refusal of the patent by the Court of Appeals of the District of Columbia that entitles the applicant to a remedy by bill in equity.

The remedy provided by bill in equity under section 4915, Revised Statutes, is not an appeal from the decision of the Commissioner or the decision of the court rendered on appeal from the Commissioner's decision, but is an original proceeding in which new or additional testimony may be taken and the case determined upon a new record. Referring to section 4915, Revised Statutes, the United States Supreme Court states in *Butterworth vs. Hoe* (112 U. S., 50; 1884, C. D., 429):

It is thereby provided that the applicant may have remedy by bill in equity. This means a proceeding in a court of the United States having original equity jurisdiction under the patent laws, according to the ordinary course of equity practice and procedure. It is not a technical appeal from the Patent Office, like that authorized in section 4911, confined to the case as made in the record of that office, but is prepared and heard upon all competent evidence adduced and upon the whole merits.

It appears to be settled that a bill in equity under section 4915, Revised Statutes, can not be maintained until the complainant has exhausted his remedy by appeal (*Kirk vs. Com. of Pats.*, 37 O. G., 451; *Prindle vs. Brown*, 136 F. R., 616; *Walker on Patents*, p. 118). It is not clear that there are now any cases in which a bill in equity to obtain a patent can be maintained until after an appeal has been taken from the decision of the Commissioner to the Court of Appeals of the District of Columbia. Between the years 1870 and 1893, however, the statutes did not provide an appeal from the decision of the Commissioner on priority in an interference case

and the defeated party's only remedy was by this bill directly from the Commissioner's decision. Walker (p. 118) states that "where the Commissioner withholds a patent by virtue of his general supervisory authority, the remedy now under consideration is the only one to which the applicant can resort, for no appeal lies to the Court of Appeals of the District of Columbia," citing in support thereof *Hull vs. Com. of Patents*, 7 O. G., 559; 8 O. G., 46. In the recent case of *Moore vs. Chott*, 192 O. G., 520; 40 App. D. C., 591, where a patent had been refused by the Commissioner under his supervisory authority even after it had been allowed by the examiners-in-chief, the Court of Appeals of the District of Columbia held that the applicant's remedy was by direct appeal to that court from the decision of the Commissioner.

In view of this case and of the court's decisions in the cases of Selden and Mattulath, *supra*, where appeals were entertained from the holding of the Commissioner that the applications were abandoned, and of the case of Heany and others, heretofore cited, in which the court indicated it had jurisdiction by appeal from any holding of the Commissioner that had the effect of denying an applicant a patent, it appears that the above statement of Walker is not now correct and that the portion of section 4915, Revised Statutes, providing that an applicant may have remedy by bill in equity "whenever a patent on application is refused, either by the Commissioner of Patents or by the Supreme Court of the District of Columbia" is a dead letter so far as the reference to the Commissioner is concerned.

The remedy by bill in equity is a part of the application for the patent and is governed by the rule of section 4894, Revised Statutes, as to laches. In other words, unless the bill is filed within one year from the decision of the Court of Appeals of the District of Columbia, it must be shown to the satisfaction of the court that the delay was unavoidable (*Gandy vs. Marble*, 39 O. G., 1423; 122 U. S., 432; *Westinghouse Electric & Mfg. Co. vs. Ohio Brass Co.*, 186 F. R., 518).

The complainant in the suit may be the applicant or the assignee (*Smith vs. Thompson*, 177 F. R., 721; *Wende vs. Thompson*, 191 F. R., 620).

If there is a party whose interests are adverse to those of the complainant, such as an opponent in an interference, he should be made the defendant and the bill filed in the federal district court for the judicial district of which that party is an inhabitant. Where there is no opposing party, the bill must be served on the Commissioner of Patents and filed in the Supreme Court of the District of Columbia unless he consents to accept service and appear elsewhere (*Butterworth vs. Hill*, 31 O. G., 1043; 114 U. S., 129; *Illingworth vs. Atha*, 51 O. G., 803; 42 F. R., 141).

Where the defeated party in an interference proceeding seeks remedy by bill in equity, the question of the patentability of the claims may be raised and will be considered by the court (*Hill vs. Wooster*, 50 O. G., 560; 132 U. S., 693; *Richards vs. Meissner*, 155 F. R., 135; *Hansen vs. Slick*, 216 F. R., 164).

The court is without authority under section 4915 to enjoin the Commissioner from issuing a patent to the successful party in an interference proceeding (*Illingworth vs. Atha*, 42 F. R., 141), and it is the practice of the Patent Office not to withhold the patent to the successful party pending the determination of a suit in equity under section 4915, Revised Statutes (Sargent, 12 O. G., 475; *Wells vs. Boyle*, 43 O. G., 753; *Dunbar vs. Schellenger*, 128 O. G., 2087; *McIntyre vs. Perry*, 169 O. G., 943).

An appeal lies from the decree of the Supreme Court of the District of Columbia to the Court of Appeals of the District of Columbia or from a federal district court to the Court of Appeals of the same judicial circuit in cases under section 4915, Revised Statutes, as in other equity cases. Formerly an appeal could be taken to the United States Supreme Court as shown by the fact that that court entertained jurisdiction in *Gandy vs. Marble*, 39 O. G., 1423; 122 U. S., 432; *Hill vs. Wooster*, 50 O. G., 560, 132 U. S., 120, and *Morgan vs. Daniels*, 67 O. G., 811; 153 U. S., 120. In *Durham vs. Seymour*, 74 O. G., 1731; 161 U. S., 235, the Supreme Court held that the Acts of March 3, 1891, and of March 3, 1885, respectively, did away with appeals of this kind from the circuit courts and the Supreme Court of the District of Columbia.

The Judicial Code, Act of March 3, 1911, continues the practice of *not* permitting appeals in such cases to the United States Supreme Court.

As shown by this elaborate system of remedies, the patent laws are, as stated in one court opinion, supremely indulgent to the claims of inventors. Various Commissioners, and others, have recommended doing away with some of these remedies and appeals, both within and without the Office.

In view of the expense to which a defeated party in an interference proceeding may subject the successful party and of the length of time during which it is possible to prevent him from receiving his patent; also of the long period an applicant may keep his rejected application alive, much may be said in favor of limiting the number of remedies. A discussion of the subject, however, would unduly extend this paper.

January 18, 1917.

ABANDONMENT OF INVENTION

A paper read November 10, 1914 before the Examining Corps of the United States Patent Office.

10

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WASHINGTON, D. C.
1914

Abandonment of Invention

By

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Abandonment of invention is referred to in the Revised Statutes, directly or indirectly, in four sections, 4886, 4887, 4897, and 4920.

In section 4886, which sets forth who may obtain a patent and under what conditions, occur the reservations "not patented or described in any printed publication in this or any foreign country . . . more than two years prior to his application, and not in public use or on sale in this country for more than two years prior to his application, unless the same (the invention) is proved to have been abandoned."

In section 4887, relating to the bearing of a foreign patent granted to an applicant in this country for the same invention, it is provided that a patent shall not be granted in this country upon an application filed more than twelve months subsequent to the filing of the application upon which the foreign patent was granted. The act of the inventor in permitting a foreign patent to issue under such circumstances operates as a virtual abandonment of his invention to the public in this country.

Section 4897, providing for the renewal of a forfeited application by means of a second application, contains the reservation "but such second application must be made within two years after the allowance of the original application," and further "and upon the hearing of renewed applications preferred under this section, abandonment shall be considered as a question of fact."

Section 4920, relating to the pleading in suits for infringement, enumerates among the proofs which may be adduced the fact that the invention had been in public use

or on sale for more than two years before the application for a patent or had been abandoned.

The term abandonment of invention is often somewhat loosely applied to three quite distinct conditions:

First: That situation where the would-be inventor has failed to complete his invention and embody it in an operative device or process useful to the public, and finally, either through discouragement or from pressure of other affairs, lays it aside uncompleted. This is hardly an abandoned invention for, properly speaking, there has been no invention. It is necessary that the inventive act shall be complete and embodied in operative and useful form, otherwise there exists merely an incomplete concept which if cast aside in that condition can be no more than an abandoned experiment or abandoned attempt to make an invention. A patent is essentially a contract between the inventor and the public in which the latter agrees to confer upon the former a monopoly, limited as to time, of the exclusive rights in his invention in consideration of the cession to the public of all such rights at the expiration of the term of the monopoly. If the invention has not been completed it can not serve as a consideration for such a contract and therefore the neglect or inability to complete it can not constitute an abandonment to the public nor serve to deter another from completing it or using it as a basis for other inventions and reaping the rewards of his greater inventive skill or diligence.

Second: That condition where the inventor completes his invention and clothes it in operative and useful form ready for disclosure to the public, and fails to make such disclosure, laying it aside for future development. There seems to be here no idea of abandonment to the public since the latter, under such circumstances, can have no knowledge of the invention nor profit from it. Such withholding of the invention from public knowledge does not prevent another and more diligent inventor from obtaining a patent on the invention so withheld from the public, nor does it prevent the dilatory inventor from later obtaining a patent if the delay in disclosure be excusable or if no other inventors have established rights during the delay.

Third: That condition arising when the inventor has

ccmpleted his invention in operative form and then, voluntarily or involuntarily, at any time, either before applying for a patent, at the time of such application or during its prosecution, relinquishes to the public his rights to that invention. This seems to be properly termed abandonment of invention, for the relinquishment is final and irrevccable, the public enters into full possession of the invention so abandoned and any subsequent patent thereto is barred to the inventor or any other person. As R Robinson tersely sums up these different classes: "The first abandonment is an abandonment of his intention to become an inventor; and leaves the field open for subsequent inventors to conceive such new ideas or such improvements upon his idea, as will complete the invention and enable them to appropriate it to their exclusive use. The second abandonment is an abandonment of his intention to render the invention practically available for any purpose, and thereupon it is regarded as never having been conceived. The third and true form of abandonment is a dedication of the invention to the public and closes the field forever against not only himself but every subsequent inventor, until the art or instrument shall once more pass from public knwledge and thus become a subject for re-invention."

The surrender of a patent to the public before the expiration of its life seems not to be properly included in the term "abandonment of invention," but rather is a dedication or gift to the public of an item of personal property analogous to the similar gift of any other form of property.

Abandcnment of invention may, therefore, be defined as the complete and final relinquishment to the public by the inventor of a complete invention of all his rights thereto. The surrender must be to the public as a whole and not merely to an individual nor to particular individuals and must be before the grant of a patent.

Abandonment of invention, once effected, is irrevo-
cable:

"An inventor may abandon his invention. This inchoate right thus once gone can not be resumed." (Pennock vs. Dialogue, 2 Peters, 1.)

Consideration of the subject cf abandonment of invention naturally follows two broad lines, those of actual abandonment and of constructive abandonment.

ACTUAL ABANDONMENT OF INVENTION.

Actual abandonment of an invention is effected by the expressed or inferred intention of the inventor to relinquish to the public his entire rights in such invention. He may expressly declare his purpose or his conduct and circumstances may make reasonable the inference that he had such intention to relinquish his rights. The circumstances tending to show such intent on the part of the inventor may and do vary in each case, but the courts look with scant favor upon forfeiture by abandonment of the inventor's rights and the intent to so relinquish must in all cases be clearly and fully established by proof.

WAYS IN WHICH AN INVENTION MAY BE ABANDONED.

An inventor may complete his invention and communicate it to the public, verbally or in writing, and at any time make known his intention to dedicate his invention to the public, waiving any rights to exclusive use by himself; or he may publish his completed invention and then neglect to use it or to seek to patent it, thus showing no intention to retain it for his own use; or he may perfect and use it and then apply for a patent before two years public use has occurred, the public use being accompanied by circumstances which show an intention on his part to relinquish his rights to the public, even though such intention was afterward repented of and an application filed. All the foregoing conditions effect abandonment of the invention, the presumption of abandonment being always strengthened where another inventor has entered the field and established an equity while the first inventor has inexcusably neglected to file an application to protect his rights. What constitutes unreasonable delay is of course a question of fact in each case. A brief outline helpful in such consideration is given in *Von Schmidt vs. Bowers*, 80 O. G., 347:

Delay in applying for a patent after an invention is made will not constitute abandonment where the inventor has used reasonable diligence to perfect the invention and avail himself of its

benefits and there is no general standard by which such diligence is to be established; but it must be reasonable under all the circumstances of the particular case. The character of the invention; the health, the means, the liberty of the inventor; his occupation upon kindred or subordinate inventions; are proper subjects for consideration. Such reasonable diligence does not involve uninterrupted effort nor the concentration of his entire energies upon the single enterprise.

A delay of years between the reduction to practice of an invention and application for a patent therefor shown to be for the purpose of first profiting from the use of the invention in secret and then from patent protection was held to constitute abandonment (*In re Mower*, 88 O. G., 191).

Abandonment of invention may be effected by a statement signed by the inventor, filed with or included in an application, dedicating to the public the matter disclosed therein, or any part of it; or the inventor may embody in one application as filed an express declaration of abandonment of an invention disclosed or claimed in another application.

The inventor may fail to claim an invention disclosed in an application containing claims to other features indivisible from such invention. The statutes require that the inventor "shall particularly point out and distinctly claim the part, improvement or combination which he claims as his invention or discovery." If he discloses an invention without any effort to claim it the presumption is that his intention is to dedicate it to the public unless the circumstances are such that he could not claim it in the same application with the invention to which he has directed his claims, or unless he claims it in another contemporaneously pending application.

Abandonment of invention by failure to claim it is discussed in *ex parte* Mullen and Mullen, 50 O. G., 837. In this case the examiner declined to examine a certain application on the ground that it covered matter shown, but not claimed, in an earlier patent granted to the same party prior to the date of the second application. He

held that applicant's only relief lay in a resissue of the earlier patent. The Commissioner, Mr. Mitchell, reversed the examiner and took occasion to say:

The only relief possible is through the right to obtain a patent upon the latter application for that which was described but not claimed in the earlier application, if such a right is recognized by law and is applicable to this case.

It is believed that applications may be divided into three different classes with reference to that aspect of the question of division which is here involved.

1. Cases where the various claims differ among themselves only as they constitute different statements of one and the same indivisible invention—cases where, in other words, the lines of division exist as mental figments only and have no corresponding existence in the concrete subject of invention. In all such cases one application only is permissible, whether pending concurrently or not, because only one patent can be granted for a single invention and a second patent for the same invention under another guise would result inevitably in an illegal extension of the period of exclusive use.

2. Cases where several distinct inventions are dependent upon each other and mutually contribute to a single result. In such cases the several inventions may be included in one patent or they may be separated into as many patents as there are separate and distinct inventions. In all such cases if a patent issues describing all of the mutually dependent inventions and claiming but one of them, a presumption of dedication arises out of the failure to claim what might have been claimed in the same application. This presumption of dedication is repelled, however, if the inventions not claimed in the patent first to issue are claimed in applications contemporaneously pending in the office.

3. Cases where the invention described and not

claimed is absolutely independent of the invention actually claimed in the first patent. In such a case the invention described but not claimed could not have been lawfully protected in one patent with the independent subject-matter which was actually secured. There can be no presumption of dedication arising out of a failure to claim in a given application what could not have been claimed in that application and it is believed that no obstacle exists in such a case to obtaining a patent otherwise allowable upon any application that may be filed before the invention has been in public use or on sale for more than two years and before actual abandonment.

It may be remarked that in the class last referred to the second application must be filed not more than two years from the patent date of the first application, else the patent will serve as a publication to bar the grant of a subsequent patent.

An invention may be abandoned by deliberately canceling claims to it from an application in which it is claimed and omitting to file other claims to it, either in the same or another application, before the grant of a patent on the application from which it was canceled. For the purpose of securing a speedy allowance the applicant not infrequently cancels claims which are under rejection on references or for other reasons and obtains a patent with more limited claims than those which he had at some time pending in his application. If he later repents of the cancellation and seeks to secure by a reissue the matter covered by the claims he had eliminated, he finds that he is unable to do so—he has abandoned the invention covered by them; there was no inadvertence, accident or mistake. Closely allied to this situation is that where the applicant inserts in the specification a disclaimer or statement of limitation of the scope of the matter claimed. The final result is equally disastrous, for the scope of the patent granted after such a history will be held strictly within the limits set by the applicant himself. This practice is well established by decisions of the Supreme Court, -from which are selected Yale

Lock Co. *vs.* Berkshire Bank, 51 O. G., 1291; Pittsburg Reduction Co. *vs.* Cowles, 55 F. R., 320; Leggett *vs.* Avery, 17 O. G., 445; Union Metallic Cartridge Co. *vs.* United States Cartridge Co., 30 O. G., 771; Shepard *vs.* Corrigan, 34 O. G., 1157; and Roemer *vs.* Peddie, 49 O. G., 2151, the following excerpts being taken from certain of these decisions:

The proceedings in the Patent Office are for the purpose of reducing the description of the real discovery and the claims to such a form that a patent may properly be granted for them. Until the patentee accepts the patent, he can not be held impliedly to disclaim anything in his real discovery. If he makes a claim which is rejected and he accepts the patent without the claim, then he waives the right to a monopoly therein (Pittsburg Reduction Co. *vs.* Cowles, *supra*).

If an applicant, in order to get his patent, accepts one with a narrower claim than that contained in his original application, he is bound by it. If dissatisfied with the decision rejecting his application, he should pursue his remedy by appeal. Under the circumstances of this case, the inventor could not even get a reissue based on the broader claim which she has abandoned (Leggett *vs.* Avery). Much less can she, in a suit brought to restrain its infringement, enlarge her patent by argument, so as to cover elements not falling within its terms, and which she had explicitly abandoned (Shepard *vs.* Corrigan, *supra*).

This court has often held that when a patentee, on the rejection of his application, inserts in his specification in consequence, limitations and restrictions for the purpose of obtaining his patent, he can not, after he has obtained it, claim that it shall be construed as it would have been construed if such limitations and restrictions were not contained in it (Roemer *vs.* Peddie, *supra*).

Under such rulings the importance of careful consideration by the examiner in requiring cancellations and

limitations and by the applicant in complying with such requirements becomes apparent.

A party having a patent involved in interference may file a reissue therefor leaving out the claims corresponding to the counts of the issue. This has been construed as a formal abandonment of the invention covered by such claims (*Lattig & Goodrum vs. Dean*, 115 O. G., 505).

An invention which forms the subject-matter of an interference may be abandoned under Rule 125 by an unequivocal, unconditional, unlimited, written declaration of abandonment of the invention, signed by the applicant in person and by any assignee. Judgment of priority will then be rendered in favor of the remaining party if there be only one, or the interference will be continued between the remaining parties if there be more than one (*Skinner vs. Murray*, 107 O. G., 542, and *Gabrielsson vs. Felbel*, 121 O. G., 691).

If each party involved in interference file such a declaration of abandonment the interference will be dissolved (*Krakau vs. Harding*, 107 O. G., 1662).

A stipulation of the parties to an interference setting forth that the issue is not patentable will be treated as an abandonment, and the interference remanded to the primary examiner with instructions to dissolve it (*Lesley & Spackman vs. Ellis*, 21 Gourick, 35-5).

An application may be abandoned without necessarily abandoning the invention covered by it, unless there be other facts to show conclusively that the inventor, in abandoning his application, intended thereby to abandon the invention also.

Another cause of abandonment after application may be the operation of equitable estoppel. An inventor who completes an invention and inexcusably delays application for its protection by a patent, does so at his own risk, since during the period of his laches another more diligent inventor may apply for and obtain a patent for the invention or intervening rights may arise to deprive the first inventor of the rewards he might have reaped by the exercise of greater diligence. Does this doctrine of equitable estoppel apply to applications filed in the Patent Office and prosecuted within the provisions of its

rules? This question has been treated in a recently published decision of the examiners-in-chief (*Barber vs. Wood*, 207 O. G., 299). Briefly stated, the facts are that while Wood's application was in issue awaiting the payment of the final fee, Barber's patent was inadvertently issued by the office without institution of interference proceedings between these copending applications of Barber and Wood and Barber soon after made machines embodying the invention and placed them on the market, selling a number of them. Wood forfeited his application after Barber's patent had issued and did not renew it until nearly eighteen months after such issuance. The application and patent then went into interference, the final adjudication of which was a decision by the examiners-in-chief awarding priority to Barber on the ground that Wood, through his delay in renewing his forfeited application when other parties had patented the invention and established intervening rights, was equitably estopped from obtaining a patent for the invention he had thus abandoned through his own laches. This conclusion appears to be based upon no proved intention on the part of Wood to abandon his invention, but rather upon the broad equities as disclosed in the record, differing in this respect from the other causes of abandonment previously referred to in this section. This decision should be read in connection with *Cutler vs. Leonard*, 136 O. G., 438; *Cain vs. Park*, 86 O. G., 797; *Mason vs. Hepburn*, 84 O. G., 147; *Crown Cork and Seal Co. vs. Aluminum Stopper Co.*, 96 O. G., 2573; *Warner vs. Smith*, 84 O. G., 311; *Christensen vs. Noyes*, 90 O. G., 223; and *Farmer vs. Brush*, 17 O. G., 150.

CONSTRUCTIVE ABANDONMENT.

Constructive abandonment of invention is effected by the application of statutes which operate entirely regardless of the intention of the inventor with respect to the abandonment of his invention.

The most usual example of constructive abandonment is, perhaps, that due to public use or sale for more than two years prior to application.

The statutes of 1793 provided that abandonment

should ensue in case of any public use of an invention before the inventor had applied for patent therefor. This was interpreted by the courts to mean any public use with the consent or acquiescence of the inventor. In 1836, this interpretation of the courts was adopted in the statutes and at the same time, the sale of the invented thing was made equivalent to its public use. In 1839, in order to alleviate somewhat the hardships imposed upon inventors by so strict a rule, and, possibly, to avoid certain difficulties arising in the consideration of questions of fact relating to consent or acquiescence in different cases, Congress provided by statute that an invention might be used or sold for not over two years before date of application for a patent without abandonment thereby ensuing. In this statute the words "with the consent or allowance of the inventor" were omitted and have not been embodied in any subsequent statute.

The courts in interpreting the statute of 1839 have held that the omission of the clause above quoted was intentional on the part of Congress, and that constructive abandonment is effected when the invention has been in public use or on sale for more than two years prior to the date of application, whether or not such use or sale is known to or acquiesced in by the inventor. The leading decision on this point is the so-called "driven well case," *Andrews vs. Hovey*, 41 O. G., 1162 (Supreme Court).

The tests for determining public use or sale constitute a separate subject for consideration and will not be discussed here.

An invention applied for after 1897, may be constructively abandoned by failure of the inventor to apply for a patent in this country within two years of the issuance of a patent in any country to any person, or within two years after the subject of invention was described in a printed publication anywhere.

Closely allied to this form of constructive abandonment is that occurring under Section 4887, where the inventor of an art, machine, manufacture, or composition of matter, has applied for a foreign patent more than twelve months before the date of application in this country,

and a patent has been granted on such foreign application before the invention has been patented in this country. In the case of designs this period of twelve months is reduced to four months. This form of constructive abandonment applies to all applications filed subsequent to March 3, 1903.

With respect to all applications filed subsequent to 1897, and prior to March 3, 1903, foreign patents granted on applications filed more than seven months prior to application in this country effect constructive abandonment of the invention covered thereby, if the patent in this country be not granted before the issuance of the foreign patent.

December 10, 1914.

Chemical Inventions and Discoveries

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Chemical Inventions and Discoveries

By

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Perhaps it would be well to preface my remarks with the statement that some things I shall say are not, as far as I am aware, supported by any court decisions, and such things must be taken, therefore, as conclusions reached as the result of a long experience in dealing with the particular questions considered, rather than as dicta sanctioned by the authority of some judge.

The provision of the Constitution under which Congress was granted authority to enact the Patent Law, gave it the power to pass laws which should secure, for limited times, to authors and inventors, the exclusive rights to their writings and *discoveries*.

It is generally the practice to speak of the Patent Laws as designed to protect *inventions*, but the language of the Constitution refers to *discoveries*. Are the two terms synonymous? Or is there a distinction between them? As a matter of fact patents have been granted and rightly so, for both *inventions* and *discoveries*, and most writers have made no particular distinction between the terms. However, the two terms, "invention" and "discovery" have quite distinct meanings and should be distinguished.

Without attempting to define what constitutes an invention, it will be of interest to differentiate the two words, and I have found no writer who has so satisfactorily discussed the difference between the two words as Merwin in his "Patentability of Inventions."

"Most patents," he writes, "are granted for inventions strictly. The patentee has invented or created a device, contrivance or mechanism, which operates according to known laws,

or depends upon familiar properties of matter. He has found out nothing new in nature but he has created a new way of using or combining familiar materials, or has caused a force in common use to operate in a new situation or for a new purpose."

The discoverer, however, as opposed to this, has found out some new law of nature or some hitherto unknown property of matter which he applies to some useful purpose. If there be a discovery, there need be no inquiry as to how it was made or how much ingenuity was needed to embody the discovery in mechanism productive of a new and useful result.

The hot blast case, so familiar to every one, is in point. Upon the discovery that a hotter fire would be produced in a furnace if the blast of air to support combustion were preheated, no ingenuity whatsoever was requisite to devise some mechanism to make the discovery available for practical purposes. Or, to cite a later case, the courts held a celluloid top for a salt shaker involved something more than a non-patentable substitution of material, and the patent was sustained because of the *discovery* of the fact that a film of moisture does not attach itself to celluloid as it does to metal or glass, with the useful purpose that this hitherto unknown characteristic of celluloid prevented the caking of salt on the top so annoying in damp weather in the case of glass or metal tops. (Hogan vs. Westmorland Specialty Co., 163 Fed. Rep., 289.) It is of interest to note that this alleged property of celluloid on the strength of which the higher court sustained the patent, appears to have been the discovery of the plaintiff's attorney, long after the patent was granted. There is not the slightest hint of any such property of celluloid in the specification of the patent; as far as the record shows this peculiar property of celluloid was wholly unknown to the patentee. I shall have occasion to refer to this later.

The court said in Colgate vs. Gold Stock Telegraph Co., 4 Banning and Arden:

"The gist of the invention is the *discovery* of the fact that gutta-percha is a non-conductor of electricity."

Mr. Justice Grier in *Corning vs. Burden*, 15 Howard, 252, said:

"A new process is usually the result of a discovery, a machine of invention."

Again quoting from Merwin, in contrasting inventions and discoveries, he says:

"The courts never contrast 'discovery' as they do 'invention' with the 'skill of the workman.' "

The determination of the patentability of an invention is often a troublesome matter and is one regarding which different minds do not agree. In *Pearl vs. The Ocean Mills*, Judge Shepley said:

"No more difficult task is imposed upon the court in patents cases than that of determining what constitutes invention and of drawing the line of distinction between the work of the inventor and the constructor."

While, as stated, no attempt is made to define an invention, the distinction between the words "invention" and "discovery" is important because quite a considerable portion of the work in the chemical divisions of this Office relates to discoveries rather than to inventions. As before mentioned, if a patent be asked for a discovery, this Office need not concern itself with an inquiry as to the mental process by which the discovery was made. A discovery may be purely accidental, as when a certain manufacturer of nitroglycerine accidentally spilled some of it upon sand by which it was absorbed, which, to his surprise, exploded, upon the application of a flame, instead of burning, as he expected.

It is related that in the winter of 1861-62 a certain distiller of oil built a fire under his still and went off to dinner expecting to return in about half an hour. While at dinner he was taken with a fit, so that it was some four or five hours before he returned. To his great surprise, he found on his return, that the gravity of the distillate then coming from the condenser, was lower than it was before he left for dinner. This was the discovery of the

cracking process in the distillation of mineral oil, in accordance with which heavy oils can be broken up into lighter ones.

Again, a patentable discovery may be the result of a long, patient series of experiments, as when the charred fibre of the bamboo was found to constitute an excellent carbon filament for an incandescent electric light.

It seems that this discussion as to the difference between an *invention* and a *discovery* is not merely an academic one but on the contrary is of considerable importance in the decision as to whether or not a claim should be allowed.

If the Examiner is satisfied that a real discovery has been made and the means or method of making the discovery of service in the arts have been devised, the claim should be allowed, however obvious such means or method may have been, once the discovery has been made. There need be, as stated, no inquiry as to how the discovery was made, and it may be doubtful whether an apparent unimportance of the discovery would justify a rejection. It is impossible to foresee what may result from an apparently trivial discovery.

In those divisions of the Office which treat applications for patents concerned with chemical industries, a considerable proportion are purely mechanical in character: in such applications nothing is involved which is either distinctly chemical or physically chemical in character. Those applications which are purely mechanical in character, it is not the object of this paper to treat. The same questions come up for adjudication in them that occur in the mechanical inventions treated by other examining divisions. The purpose of this paper is to set forth, in a more or less desultory manner, some of the problems which are peculiar to applications for patents for chemical inventions or discoveries.

In the first place, it may be noted that a broad distinction exists between chemical discoveries and inventions which are wholly mechanical. The distinction, which is far-reaching in its effects, is this: No prophesy is possible in chemical discoveries such as is frequently possible in purely mechanical inventions. From an inspection of the drawings and a perusal of the speci-

fication in the majority of applications for purely mechanical inventions, it is often safe to say that the invention is operative. On the contrary, it is never possible to foretell with certainty, that any untried chemical process is operative. For example, it might be presumed that because caustic potash will give a certain result, it would be safe to infer that caustic soda would have the same effect, and would therefore be an exact equivalent. But such an inference would not be safe; an actual trial or demonstration would be necessary to prove the inference. In many cases the two would be equivalent but not in all. Both, for instance, will saponify fat but the one yields a soft soap and the other a hard soap.

One element or agent is never universally the equivalent of another. Whether two elements or agents are equivalents depends on the particular problem. This is true, though it is not always recognized in mechanics. A spring is often the equivalent of a weight but there are cases where they act so differently that the substitution of one for the other involves patentability.

The courts have repeatedly recognized the futility of an attempt to prophesy or foretell in chemical procedure. Thus in *Stevens vs. Keating*, 2 Webster, 181, the judge said:

“I may say that I do not quite go along with the doctrine of equivalents in chemistry, applied in the same way as in mechanics. . . . Although you can predict with confidence in mechanics, in some instances . . . in chemistry you almost entirely fail. You can not, because sulphuric acid will succeed, tell at all that nitric acid will succeed or that any other acid will succeed, until you have tried. . . . You can not anticipate the result.”

In *Tyler vs. Boston*, 7 Wallace, 327, the court said:

“Now a machine, which consists of a combination of devices, is the subject of invention and its results may be calculated, *a priori*, while a discovery of a new substance by means of chemical combinations of known materials is empirical.”

In *Hicks vs. Kelsey*, 18 Wallace, 670, the court said:

"And in some compositions of matter, a different ingredient changes the identity of the compound, whereas an iron bar in place of a wooden one and subserving the same purpose does not change the identity of the machine."

To the same effect was the decision in *The National Filtering Co. vs. Arctic Oil Co.*, 8 Blatchford, 416, in which a patent for filtering Coal Oil or Petroleum through bone black was sustained, notwithstanding the fact that the same filtering agent had been employed in filtering other liquids, even vegetable oils.

The gist of the matter appears to be, as suggested in *Tyler vs. Boston* (*supra*), that many of the meritorious inventions in chemical lines are based upon discoveries. Patents granted thereon are founded on schemes that render the new discovery available for useful purposes, rather than upon an ingenious (or "surprising") combination of mechanisms productive of some new mechanical result or of some old mechanical result in a new or improved manner.

If this is the fact, and if, as stated, it is impossible to foretell what will happen in a chemical procedure until it has been tried, why then, it may be asked, should not every applicant in chemistry be granted a patent unless the claims be exactly met? And does the doctrine of equivalents obtain at all in determining patentability in applications in chemical lines?

The best answer to these queries, and perhaps the only one, is based upon the doctrine of *reasonable expectation*. This doctrine is very well stated by Commissioner Duell in *Bender vs. Hoffman*, 85 O. G., 1737. The alleged invention involved in that case was for an alkylated dye stuff, and the decision, in substance was that the effect of alkylation on other dyes being so well known, there was good reason to anticipate what would be the result in any particular case. The decision of the German Patent Office was quoted with approval as follows:

"It has not been proved or pretended that through this process another technical result

would be obtained beside the known effect of the greater resistance to alkalis. . . . After so many precedents such a process of alkylation is no longer patentable, if by the same, a new technical result is not obtained."

It will be useful to consider, by way of example, some of the various factors which enter into the consideration of chemical procedures, or which may modify in one way or another the effects produced.

First, there are the materials, chemicals or ingredients involved, and under this—

- (a) The quantities or proportions;
- (b) The purity of the materials;
- (c) The condition of the materials, as solid, liquid or gaseous, or if metals, as being in the colloidal state, etc., etc.
- (d) The strength of solutions, if the agents are in solution;
- (e) The solvents employed.

Second, the conditions such as—

- (a) Temperature;
- (b) Pressure;
- (c) The nascent state;
- (d) Electrical conditions or other conditions which may effect molecular or atomic vibrations such as light, X-rays, etc.
- (e) The effect of catalysts.

Third, The time factor.

No pretense is made that this list comprises all the factors or variables which may influence the results obtained in chemical procedures. Nor is there any possibility of discussing at any length these factors within the proper limits of this paper. But it may not be wholly without interest to consider a few examples of cases in which some of the factors or variables noted play an important part.

Chemical reactions are either reversible or irreversible. A reaction is said to be reversible when a change of

conditions changes its direction. Quantities and temperatures are important in determining the direction of a reaction. As an instance of the effect of quantity or mass in a reaction, hydrogen sulfid will precipitate cadmium sulfid from solutions of cadmium chlorid, but cadmium sulfid dissolves in an excess of hydrochloric acid. As to temperature as a determining factor, if sal ammoniac be heated to 350°C it decomposes into ammonia and hydrochloric acid gas, but if the temperature be lowered, ammonium chlorid is reformed.

Prior to the invention of Adams in 1869, all attempts to electro-deposit nickel on other metals, as iron, had failed, because the solutions employed had not been sufficiently pure. Adams succeeded where others had failed and his patents were sustained. The United Nickel Co *vs.* Harris et al., 17 O. G., 325.

Practically, the exact contrary to this is found in the generation of hydrogen resulting from the action of sulfuric acid on zinc. In this impurities play an important role. If the zinc be quite pure, it is scarcely attacked by the acid, due to a film of hydrogen forming on the zinc, protecting it from the acid. The zinc should contain certain impurities which are more electro-negative than zinc. Again the acid should be quite dilute.

The time factor is often very important. In the synthetical production of ammonia, as carried out in the works of the Badische Anilin-und Soda Fabrik Gesellschaft, it is important that the ammonia as produced be at once removed from the field of reaction. As opposed to this, in the old bark method of tanning, it was essential that the skins remain in the tanning bath a good part of a year.

Another illustration of variation of the factors will be instructive. Synthetical varnish resins or gums had been made by condensing phenols by the aid of aldehydes, certain temperatures and pressures being requisite. It had been demonstrated, however, that the process of condensation must not be carried too far, as otherwise compounds were formed that were insoluble in varnish solvents and so were unsuitable for the manufacture of varnishes. It occurred to Dr. Baekeland to experiment along this line, to see what he would obtain if he carried

the condensation further than others had done. As a result he produced a new substance which he called "Baekilite," a substance with which many of you are doubtless more or less familiar.

The conclusions to be drawn from these illustrations are obvious. If a variation of any of these factors results in a new and unexpected technical product, different in kind, patentable novelty must evidently be conceded. But on the contrary, if the variation gives only the same kind of result and the effect is what might reasonably be expected, then, generally speaking, no patentable invention has been made, as e. g., if the temperature be raised with nothing more than the expected result, that the reaction is correspondingly hastened.

Or, to put the proposition in somewhat different language; the variation to be patentable should be something *critical*. To illustrate what is meant by critical, it might be well to refer to certain mathematical curves, whose curvature gradually changes with a change in the value of the variables, until certain values are assigned to the variables, but when those values are assigned, the curvature suddenly and sharply changes, at a point called in mathematics, a cusp.

In the curve representing the solubility of sodium sulphate, there is such a cusp at 33°C. Below that temperature solubility increases with a rise of temperature, but at that temperature there is a sharp change and solubility decreases with a rise in temperature. The temperature of 33°C is therefore critical in the process of dissolving sodium sulphate in water.

One other illustration of the term *critical* will be given. Crude mineral oil consists of a mixture of a large number of different hydrocarbons having different specific gravities and different degrees of volatility. If such oil be carefully distilled it is possible to obtain different fractions which are only educts, that is to say, such fractions that the sum of them contains only what was in the original crude and in the same proportions. Such a process of distillation would be like an orange sorter in which oranges of various sizes are run over an inclined plate provided with circular holes of different diameters. But when a certain temperature is employed in dis-

tilling crude oil, there occurs a breaking up of some of the molecules of the heavier ingredients resulting in an increased yield of the more volatile distillates. The distillation of oil under such temperatures, a process of destructive distillation, is generally known as cracking. Owing to the increased demand for gasoline, there is great activity in inventions in this line. Evidently, a temperature which will crack oil is critical.

Chemistry is concerned with intra-molecular changes and chemical industries have to do with processes and apparatus by which man is enabled to control chemical affinities in such a manner as to produce new products resulting from intra-molecular changes.

The sciences of mechanics and physics are concerned only with changes outside of the molecules, while chemical industries relate to changes inside the molecule. In the former the essential characteristics of the material operated upon remains unchanged, but in the latter they are altered. This is, of course, elementary but is referred to here for the purpose of emphasizing the difference in the questions necessarily presented for adjudication in considering applications along chemical lines from those arising in purely mechanical inventions.

From the very nature of the problem presented to one who has made an invention or discovery in a chemical line, and from the fact previously stated, that prediction or prophesy is impossible in chemistry, and that slight changes in conditions may profoundly and critically alter the result (as has been illustrated) some important conclusions may be drawn.

One important conclusion is this: That the utmost exactness of detail should be given in describing the invention or discovery for which a patent is sought. Objection to this proposition has been made on the ground that if the procedure be too exactly described, the patent will be so limited as to be worthless. But a sufficient answer to this objection is that the applicant is not required to limit his claims beyond operative limits unless the state of the art is compelling. The exact procedure by which the best result has been obtained should be detailed and then the applicant should state how widely he has found that he can depart from the exact details recited.

One of the points in securing this necessary detail in description and on which sufficient emphasis is not always laid, is an insistence on accuracy of nomenclature.

In a recent case, an applicant stated that he employed amido-compounds, but each and every one of the chemicals specified was an amino-compound. On a requirement being made to change amido to amino, the applicant cited certain authorities to support his contention that the substances he employed were called by that name by some authorities. Thereupon the examiner replied that he was well aware that certain writers had used the terms indiscriminately, but that was no reason for not insisting that applicant use words with discrimination. In order that it may be known just what a patent does or does not cover, exactness in the use of language should be insisted upon.

The proposition has been made that a patent can not be generic unless it is more or less indefinite, and the apt reply to that is old. The boundaries of a thousand-acre farm may be just as well defined as of a one-acre farm.

In *Merrill vs. Yeomans*, 4 Otto, 568, the court said:

“The public should not be deprived of rights supposed to belong to it without being clearly told what it is that limits these rights.”

A not infrequent mistake in describing chemical processes consists in basing a generalization upon a certain characteristic which is wholly impertinent to the problem. As is familiar to every one all objects or materials have many characteristics, and any particular characteristic may be made the basis of a classification. The lexicographer selects the name of a substance as his basis of classification and puts together all objects the initial letter of whose name begins with any letter of the alphabet. But the lexicographer's scheme of classification evidently would be an absurd one to use in drawing claims. It would of course, be ludicrous for one who found that copper would do in a certain process to claim substances whose names began with the letter C.

More specifically, consider ordinary white granulated

sugar. It is white, it is granular, it is sweet to the taste, a solution of it has a certain effect on the polariscope, and chemically speaking it is a carbohydrate, i. e., a compound of carbon, hydrogen and oxygen in which there are twice as many hydrogen atoms in a molecule as there are oxygen atoms; thus it could be considered as a compound of carbon and water. Sugar has other characteristics, but those mentioned suffice to illustrate the point it is desired to make. Suppose in some particular process, the applicant were to use sugar, and in an effort to secure a broad generic claim, he covered carbohydrates. Then it should be made to appear from the inventor's researches or otherwise (as from the nature of the case) that sugar was effective because it is a carbohydrate and that carbohydrates generally would do. Suppose one were sweetening his coffee: Sugar will do it; many other carbohydrates, as starch, will not. Saccharin, which is not a carbohydrate but a coal tar product will do the work of sugar in sweetening coffee. However, saccharin could not be used as a substitute for sugar in the work of increasing the yield of alcohol when added to a liquor to be fermented.

It is evident then, that the question of equivalency must depend upon the particular problem. For drying air, strong sulfuric acid, anhydrous glycerin, strong alcohol, calcium chloride or carbide and hygroscopic salts generally might be equivalents. These substances, however, would probably not be equivalents for any other purpose.

It is clear, therefore, that one is able to generalize in phrasing claims for a chemical invention or discovery when, and only when, he thoroughly understands the principles involved and as a result of his own or other's experiments has ascertained what are equivalents, and as to equivalents, what are the common characteristics of two or more substances which make them equivalents for the particular purpose in hand.

In this connection, see Matheson *vs.* Campbell, 79 O. G.; 686. It is interesting to note that the judge in that case spoke of the invention as a discovery. See, also, the cases, *In re Dosselman and Neymann*, 167 O. G., 983, and *In re Ellis*, 167 O. G., 981.

The courts have repeatedly stated (as in *Cahill vs. Beckford*, 1 Holmes, 48) that it is not essential to the validity of a patent that the inventor should have been sufficiently learned to have thoroughly understood or accurately stated the philosophy of a process which he has invented or discovered and reduced to practice.

This is true without doubt: it follows, however, from what has been said, that unless the inventor or discoverer does thoroughly understand the philosophy of a process of which he is the inventor or discoverer, he is wholly unqualified to know what are equivalents or how to draw broad claims.

The writer calls to mind a certain attorney of excellent standing before this Office who, it was related, stated that he did not pretend to undertake to understand fully the whys and wherefores of many of the inventions for which he solicited patents. He left that to the inventors, he said. It is submitted that that attorney or any other would be in position to serve his clients much better, because of the ability intelligently to draw broad claims, if he fully understood all of the principles involved in the applications he prosecuted before this Office.

If the attorney who prosecuted the application for a patent for a celluloid top for a salt shaker had understood the invention as the attorney who defended the patent in the higher court did, he would have drawn a claim for a top for a salt shaker made of material repellant to moisture.

The courts may, and sometimes do, give a patentee the benefit of unmentioned equivalents. Thus, in *Chadeloid Co. vs. De Ronde*, a patent was held to be infringed although the infringer replaced alcohol by acetone, even in the face of the fact that there was no hint of the equivalency of alcohol and acetone in the patent. It is believed, too, that no one could have foretold that they were equivalents in the particular case until tests had been made. So, too, in *Triebacher Chemische Werke Gesellschaft vs. The Roessler and Hasslacher Chemical Co.*, 209 O. G., 1689, for a pyrophoric alloy of cerium and iron, the court gave the patentee the benefit not only of an unnamed equivalent but of an

equivalent which the language of the claim would exclude.

But to rely upon the beneficence of the court is not very safe, in face of other decisions to the effect that a patentee is entitled to no more than he has described.

Speaking of the liberality of the courts, the writer may perhaps venture his individual opinion that in some cases, the courts have been extremely liberal in construing patents going further than equity demands, when it is remembered, as has been stated, that in chemical procedures, it is absolutely impossible to predict with certainty, or to say that any proposed operation will turn out as expected until trial has been made. It would not be surprising if a reaction along this line would occur sometime.

The patent system was inaugurated to promote the growth of the useful arts, and with all deference to the learned judges of our courts, it seems to the writer that, while the utmost care should be taken to make the measure of protection commensurate with the amount of advance in the art contributed by an inventor or discoverer, protection should not go beyond that point. To afford protection to an inventor or discoverer for something beyond or outside of his disclosure is to give him too much, more than his discovery deserves. To do so places a serious handicap upon subsequent meritorious inventors or discoverers.

This criticism would seem applicable to the decision of the court to which reference has already been made, viz., the celluloid salt shaker top case, in which a patent was sustained on account of a certain property of a certain substance, which property was not mentioned in the patent, and was apparently unknown to any one when the patent was before the lower court (where it was declared invalid) and was only discovered by plaintiff's counsel when the case was before the higher court. It might be said that the property necessarily resided in the particular substance whether it was known or not. The patentee did not in that case add anything to the sum of human knowledge. He made no advance in the art. Counsel for the plaintiff made the discovery in that case and the reward, should, if it belonged to any one, have

accrued to him. The true rule is stated in the decision in re Sexton, C. D., 1873, page 66:

"While a generous liberality should be shown to inventors, so as to afford ample protection for everything rightfully their own, an unwarrantable expansion of patents is a gross violation of lawful privilege, and the infliction of a great wrong upon other inventors and the public generally."

There are numerous decisions to the effect that a discovery or bare principle is not patentable. What is patentable is the apparatus or process by which the discovery is made to subserve some useful purpose.

It follows from this that claims based upon a chemical invention or discovery should be drawn in mechanical terms, i. e., in terms of the mechanical steps actually taken to embody the invention or to execute the process. An inventor has no right to claim operations of nature. His claims should cover the steps or means by which he puts into operation, and governs the operation of the natural forces of which he is availing himself to produce the result aimed at. This is not, however, to be construed too strictly. An applicant might, of course, for example, cover, in his claims, the step of heating and need not, unless the state of the art or the nature of the particular work requires it, state whether he heats over a naked fire, by a jacket or steam coil, by injected steam or hot gas, or by an electrical resistance.

Sometimes an applicant argues against a reference because of a different theory of operation. But it is axiomatic that if two parties act upon the same substance by the same series of steps arranged in the same order they are bound to obtain the same result, however much their theories may differ as to the results obtained or the reactions involved. This consideration affords an additional reason for requiring an applicant to cover in his claims the steps that he takes; it is, however, often not only admissible but desirable to limit what he does by a statement of the result produced by the steps he takes as, for example, adding an acid until the solution is neutral to litmus paper, or heating iron until it becomes incandescent.

In this same line should be considered the cases of prior accidental production of a given result. Reference has been made to some of the variables or factors with which chemical procedures are concerned. The factors or variables are numerous and frequently a considerable number of them are independently variable. Let it be supposed that in the execution of a given process there are several independent variables and that a certain peculiar result was occasionally obtained when a wholly fortuitous group of values were given by chance to these several variables. But the one executing the process did not know just what particular set of values he ought to assign to his variables to produce this peculiar result whenever he wanted it. He only got it haphazard and by chance. The subsequent discoverer who ascertained the particular set of values he should assign to the variables in order to produce the peculiar result without failure and everytime he tried, would not be anticipated by such prior accidental production. See, Tilghman *vs* Proctor, 12 Otto, 707.

Speaking of the form which should be given to the claims drawn for a chemical discovery, it may be remarked that a common mistake made in drawing claims in such a case, is to make them fail to tell the story because of indefiniteness. A common form of indefiniteness is involved in the use of such words as "predetermined" or "desired." Neither the Office, nor the court which may be called upon to pass on the patent, possesses any means of searching the mind of the inventor to ascertain what is meant by such words. Sometimes an answer is made that the specification affords sufficient explanation; but the answer is not a good one. The statute requires that the claims point out what is conceived to be novel. In one case recently an applicant claimed substances "corresponding in properties to calcium hydroxide." This, when analyzed will be found to be wholly indefinite. In what properties did the substance correspond to calcium hydroxide? If in all, then it must be calcium hydroxide and nothing else. If it was not calcium hydroxide, it must have some properties different from those of calcium hydroxide. But the Office was not told in what respects it corresponded and in what it differed.

In another case an applicant claimed, "molasses or similar material," but failed to state the essential characteristics of the other material in which it was similar to molasses.

In the decision of the Commissioner in *ex parte Adler*, 65 MS, Dec., 337, the words "such as" in a claim were condemned.

Another thing should be said about claims. It sometimes happens that the character of an invention is such as to constrain the Examiner to allow a claim in a form which would be objectionable in other cases. If an invention has truly been made the inventor is certainly entitled to some sort of protection, and if a claim in one form can not be allowed, then it should be allowed in some other form. To illustrate, take the case of tanning a skin. After a skin has been properly prepared by the usual steps, it is tanned by immersion in a tanning liquor or ooze wherein it is allowed to remain until tanned, the strength of the tanning liquor being generally periodically increased. The process seems to be the same whatever the constitution of the ooze may be, and it would appear that a change in the composition of the ooze does not alter the process. Let it be supposed that the inventor has made a new composition of matter for tanning. He can secure protection by claiming the composition. There would be no trouble in that case, but apparently he should not be allowed a claim for a new process. The process would be simply the old one of immersion. But let it be supposed that the material used for tanning was old but had never been used for that purpose. Some one discovered that picric acid would tan skins. Evidently a patentable discovery was made and the discoverer was entitled to patent protection. But how was he to be protected? It does not seem that he would be entitled to claim the substance even with a limitation of the statement of the use. A claim for a tanning agent consisting of picric acid, is after all only a claim for picric acid and such a claim would simply amount to claiming an old substance under a new name. Thus it appears that the Examiner would be obliged to grant a patent on the process; there would be no other way of protecting the invention. Cir-

cumstances alter cases even in the matter of the form of claims to be allowed.

When an inventor or discoverer sets into operation certain forces acting on certain materials and so conditions the forces in action that their resultant produces a new product in consequence of intra-molecular changes, he has made a patentable invention. Inventions along these lines are sometimes of vast importance and present most dazzling dreams of wealth. These dreams are sometimes realized.

Consider again for a moment, the cracking of petroleum. Theoretically a heavy hydrocarbon of the paraffin series represented say, by the formula $C_{21}H_{44}$ might be broken up so that each molecule would yield three molecules each containing seven carbons. Could this be done exactly a gallon of heavy residuum, worth perhaps 2 or 3 cents, would yield about a gallon and a half of excellent gasoline, worth at the present writing at retail about 30 cents. As the annual consumption of gasoline in this country is in excess of two billion gallons, it is easy to see how an invention along such lines is well adapted to raise the hopes of the inventor to great heights.

Sometimes the inventor enters fields in chemical researches which are either wholly new or in which very little experimentation has been done. Let it be presumed, say, he makes an invention in the field of photochemistry, in which very little has been done except along the line of photography, or being concerned with any of the numerous problems which may arise in biochemistry, makes discoveries involving the action of enzymes, antitoxins or various micro-organisms. In such cases problems are presented to this Office which, from the very nature of the case, must be treated quite differently from the manner in which ordinary mechanical inventions are treated.

The Cameron Sewage purification patent affords an interesting illustration. In that case it was found that by exposing sewage in a septic tank (i. e., one from which both light and air were excluded) for a considerable time to the action of such anaërobic bacteria as would operate under such conditions, that all the solids in the sewage

would be liquefied. Afterwards the sewage was run over baffles in the air and exposed to light where aërobic bacteria (i. e., those flourishing in those conditions) served to purify the liquefied sewage. The result claimed for this process was that sewage was converted into a liquid that was quite pure, if not potable. This patent was sustained (*Cameron Septic Tank Co. vs. Village of Saratoga*, 159 F. R., 453).

What is the Office to do with such processes? And what should be the treatment accorded to apparently foolish inventions? A very old U. S. patent claimed that by putting an alcoholic liquid in a tower 80 feet high, the water and alcohol would stratify. This was, of course, nonsensical and equally nonsensical was an old English patent for making gold out of wheat straw. This Office frequently has to deal with an application which appears perfectly foolish.

The Office is, however, not justified in absolutely refusing a patent on some procedure which at first blush appears hair-brained. How many of the inventions now in daily use, as, e. g., wireless telegraphy, or locating a bullet in a man's body by X-rays, would have been regarded as the ravings of a hopeless maniac by our pilgrim fathers. Notwithstanding, the Office is entitled to some evidence, more than the oath which forms a part of the application, that what appears to be a crazy notion, is something more than the vaporings of a lunatic. It will be remembered that a man who has been declared insane by the courts is not thereby incapacitated from filing an application for a patent.

In this lines of cases, it appears that sometimes an actual demonstration may be demanded. In other cases other evidence may be accepted as good and sufficient. Not infrequently this takes the form of a properly verified showing by recognized, disinterested experts, who either have themselves witnessed a demonstration, or have themselves conducted experiments. Such evidence should be carefully scrutinized, first as to the qualifications of the experts and second as to the character of the experiments. Ordinarily, only facts should be set forth in the affidavits, giving exact data of experiments witnessed or performed, with results obtained,

and the necessary tests by which the results were ascertained to be what they were alleged to be. There should, of course, be nothing of a hearsay character in the evidence.

In one case, the Examiner received an affidavit from one of the best known chemists in the country, one justly having the reputation of knowing more about a certain chemical art than any other man in the country. In the affidavit, the affiant stated that in the particular experiment described a certain pipe was said to introduce a certain gas into the system and he believed it did. Such a piece of hearsay evidence, relying on what he said he had been told by some unknown person, of course, vitiated the affidavit. In the same affidavit, the affiant, after detailing the facts (as supported by the hearsay evidence) gave his conclusions. That was, it may be remarked, rather out of place. It is the province of the Examiner to draw his own conclusions.

Is the Office obliged to accept conclusions or to acknowledge the correctness of what is set forth in affidavits? Not at all. What is set forth in the affidavits may be persuasive but is not necessarily conclusive.

In one case which came before the writer, an applicant alleged that certain miscible liquids after being thoroughly mixed would stratify and could be separated by decantation, and he based claims thereon. The Examiner knowing that no such action could occur rejected the claims as inoperative, whereupon the applicant submitted affidavits from five different persons that the operation would take place. He might as well have submitted affidavits that a man could lift himself by pulling on his boot straps. Upon the Examiner giving a final rejection, a petition was taken to the Commissioner who was asked to instruct the Examiner—

“That an unsupported statement of theory by an examiner is not a sufficient answer to facts established by affidavits and exhibits.”

In his decision, on the petition, the Commissioner stated that an examiner—

“is not bound to accept affidavits as proofs unless he is satisfied of the truth of the allegations con-

tained therein. He may reject the conclusions stated in the affidavits when those conclusions are contrary to well-known scientific laws or facts."

Ex parte Davidson, 120 O. G., 2753.

Only one other point will be considered.

I have been speaking of applications which are concerned with inventions along paths that have been little trod and about which, therefore, little can be found either in patents or publications, and have thrown out a few suggestions about the treatment of such cases. I desire further only to state that in such cases, it appears that rather more should be required of the inventor in the way of describing his invention than in other cases. The statute requires that the specification shall be—

"in such full, clear, concise and exact terms as to enable any person skilled in the art or science to which it appertains or with which it is most nearly connected, to make, construct, compound and use the same."

The case is supposed to be one in which there is no art or science before known and no nearly analogous art or science. Such cases are not very common but still they do occur. It seems clear that in such a case, the Office should require extremely explicit details, more than is necessary in other cases. Whether or not the Examiner should question the operativeness of the alleged invention or discovery in those cases, must depend upon how they appeal to him.

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